

Colonial Administration in the Far East

THE
PROVINCE OF BURMA

IN TWO VOLUMES

VOLUME II

Colonial Administration in the Far East

THE
PROVINCE OF BURMA

A REPORT PREPARED ON BEHALF
OF THE UNIVERSITY OF CHICAGO

BY

ALLEYNE IRELAND, F. R. G. S.

AUTHOR OF

"TROPICAL COLONISATION," "THE FAR EASTERN TROPICS," ETC.

II



BOSTON AND NEW YORK
HOUGHTON, MIFFLIN AND COMPANY
The Riverside Press, Cambridge
1907

Copyright, 1907, by
ALLEYNE IRELAND

XV
JB 450
.I 8



CONTENTS OF VOLUME II.

PAGE

POLITICAL MAP OF THE FAR EASTERN TROPICS	Following	1023
--	-----------	------

CHAPTER XL.

THE FINANCIAL SYSTEM.

References	521
History of the Currency Question in India	ib.
Indian Currency prior to 1893	522
Financial Difficulties caused by the Fall in the Value of the Rupee	ib.
Effect of the Fall of Exchange on Government Servants	523
Effect of the Fall of Exchange on the Export of Produce	ib.
General Effect of the Fall of Exchange on Indian Commerce	524
Alleged Effect of the Fall of Exchange on the Volume of Imports and Exports	525
Effect of the Fall of Exchange upon the Investment of Capital in India, Probable Effects if the Fall in Exchange should continue	526
Action following the Issue of the Herschell Report	527
The Currency Committee of 1898, and the Final Action on Indian Currency	ib.
Average Value of the Rupee, 1873-99	528
The Financial Machinery of the Indian Government	ib.
Responsibility for Administration of Indian Revenues	ib.
Expenditure in England	ib.
Administrative Procedure in the Indian Office	529
Home Estimates	ib.
Audit of Home Accounts	ib.
Organisation of the Finance Department	530
Central Financial Department	ib.
District Treasuries	ib.
Functions of the Finance Department in Relation to the Collection of Revenue	531
Revenue System of India compared with that of the United Kingdom	ib.
Brief Outline of the Indian Revenue System	532
The Functions of the Finance Department in Relation to Expenditure, Civil Expenditure	533
Public Works Expenditure	534
Military Expenditure	ib.
Movement of Funds	ib.
Accounts of District Treasuries	535
General Accounts	ib.
Estimates	536
Functions of the Public Works Department in Relation to Expenditure, Operations of Public Works Department	537
Military Works	ib.
Telegraphs	ib.

CHAPTER XI.—*Continued.*

	PAGE
Famine Protective Works	538
Railways	<i>ib.</i>
Financial Administration of Public Works Department	<i>ib.</i>
Public Works Estimates	<i>ib.</i>
The Audit of Public Accounts	539
Audit by the Civil Accountants-General in the Provinces	<i>ib.</i>
Audit in the Public Works, Post Office, and Forest Departments	541
Test Audit	<i>ib.</i>
Opinions of the Indian Expenditure Commission on the Subject of Indian Auditing	542
English System	<i>ib.</i>
Indian System	543
Audit in India	<i>ib.</i>
District Treasury Audit	544
Departmental Audit	<i>ib.</i>
Test Audit	<i>ib.</i>
Independence of Comptroller and Auditor-General	545
Appropriation Report	546
Examination at Home of the Audited Accounts of the Indian Govern- ment	547
Audit of Home Accounts	548
The Indian Coinage Act, 1906	549
Silver Coinage	<i>ib.</i>
Nickel Coinage	<i>ib.</i>
Bronze Coinage	<i>ib.</i>
Dimensions and Designs of Coins	550
Legal Tender	<i>ib.</i>
The Indian Paper Currency Act, 1905	551
Value of Currency Notes in Circulation, 1895-1904	552
Value of Silver Coin Reserve, 1895-1904	<i>ib.</i>
Number of Currency Notes of Each Value in Circulation in Burma, 1905, 1906	<i>ib.</i>

CHAPTER XII.

FINANCIAL ADMINISTRATION.

References	553
The Provincial Contract System	554
The Old Centralised System	<i>ib.</i>
Evils of the Old System	<i>ib.</i>
Reform suggested in 1867	556
Reforms effected by Lord Mayo	557
The Present System of Provincial Contracts	558
The Burma Provincial Contract	561
The Provincial Contract for the Five-year Period 1897-98 to 1901-02	<i>ib.</i>
Revenue and Expenditure Heads which are shared between Imperial and Provincial	<i>ib.</i>

CONTENTS OF VOLUME II.

iii

CHAPTER XII.—Continued.

PAGE

Revenue and Expenditure Heads which are wholly Imperial or wholly Provincial	562
Classification of the Public Funds	563
Five Classes of Funds	ib.
Imperial Revenue	564
Imperial Expenditure	ib.
Provincial Revenue and Expenditure	565
Incorporated Local Funds	ib.
Excluded Local Funds	566
Receipts and Expenditure of the Excluded Local Funds, 1905	ib.
Municipal Funds	567
General Financial Statistics	ib.
Gross Receipts and Expenditure of Burma during 1900-01 and 1904-05, Apparent Surplus under the Head "Imperial"	568
Revenue from Taxation and from other Sources	ib.
Revenue of Burma divided into Receipts from Taxation and Receipts from other Sources, 1905	569
Rate of Taxation per Capita	ib.
Rate of Total Revenue per Capita	570
Per Capita Figures no true Index of Taxation	ib.
An Alternative Method of Estimating Taxation	ib.
Standard of Living in Tropical and in Non-tropical Countries	571
Internal and External Trade	ib.
Relation of Taxation to the Value of Exports	572
Relation of Total Government Receipts to Value of Exports	573
Sources of Public Revenue	ib.
Distinction between Revenue and Receipts	ib.
Main Heads of Revenue	574
Opium Revenue	ib.
Salt Revenue	ib.
Stamp Revenue	575
Excise Revenue	ib.
Apparent Discrepancies in the Official Reports	576
Provincial Rates	ib.
Customs Revenue	ib.
Customs Duty on Imports, 1904-05	ib.
Assessed Taxes; Income Tax	577
Cost of Collecting the Revenue	578
Receipts and Expenditure of Revenue Departments, 1904-05	ib.
Objects of Public Expenditure	579
Proportion of Public Expenditure devoted to each Object, 1904-05	

CHAPTER XIII.

THE LAND REVENUE SYSTEM.

References	581
Land Revenue Policy	ib.

CHAPTER XIII.—*Continued.*

PAGE

Origin and Importance of the Inquiry	581
Alleged Connection between Revenue Policy and Famine	582
The Two Kinds of Settlement, Permanent and Temporary	583
The Two Classes of Temporary Settlements, Zemindari and Ryotwari, Suggested Reforms in Ryotwari Settlements: Revenue to be a Definite Share of Gross Produce	584
Impracticability of the Suggestion that the Land Revenue should be fixed at a Share of the Gross Produce	585
Its Effects if adopted	<i>ib.</i>
The Term of Settlement: Suggested Minimum of Thirty Years	586
Considerations which determine the Term of Settlement	587
Improvements in Procedure rendering Re-settlements less Disturbing, Exemption of Improvements from Assessment	<i>ib.</i>
Effect of Long as against Short Settlements in Increasing Resources of the People	588
Suggested Limitation of Government Enhancements to rise in Value due to (1) State Improvements, (2) Rise in Prices	<i>ib.</i>
Limitation of Cesses on Land	589
Present Incidence of Local Rates	590
General Conclusions as to Burden of Local Taxation	<i>ib.</i>
Detailed Examination of alleged Connection of Revenue Assessments with the Famine-resisting Resources of the People	<i>ib.</i>
Agricultural Losses resulting from Famine	591
Probable Effects of an Abatement of the Land Revenue on the Resources of the People	<i>ib.</i>
The Classes which suffer from Famine	<i>ib.</i>
Theory of Connection between Land Revenue and Famines rejected by Famine Commission, 1901	592
Three possible Causes of Hardship	<i>ib.</i>
Summary of Propositions established	594
Conclusion	<i>ib.</i>
The Land Revenue System of Burma	595
Land Tenures, Historical	<i>ib.</i>
Present Land Tenures in Lower Burma	597
Tenants	<i>ib.</i>
Town and Village Lands	598
Present Land Tenures in Upper Burma	<i>ib.</i>
Town Lands	601
Land Tenure Statistics	<i>ib.</i>
Survey and Settlement	602
The System of Survey	<i>ib.</i>
Supplementary Survey	603
System of Settlement, Lower Burma	604
Assessment of Fallow Land	605
Remissions	<i>ib.</i>
System of Settlement, Upper Burma	606
Supplementary Survey	607

CONTENTS OF VOLUME II.

v

CHAPTER XIII.—*Continued.*

PAGE

The Thathameda, or House-tax, in Upper Burma	607
Minor Sources of Land Revenue	609
Capitation Tax	ib.
Land Rate in Lieu of Capitation Tax	ib.
Miscellaneous Land Revenue	610
Revenue from Fisheries	ib.
Statistics of Land Revenue	ib.
Details of Land Revenue	ib.
Details of Miscellaneous Land Revenue	611
Agricultural Loans	ib.
The Land Improvement Loans Act, 1883	612
The Agriculturists' Loans Act, 1884	ib.
Amount of Loans under the Acts	613
Agricultural Advances during 1905	ib.
Co-operative Credit Societies	614
Loans by Government and by Native Money-lenders	ib.
The Co-operative Credit Societies Act, 1904	ib.
Abstract of a Resolution of the Government of India on the Subject of Co-operative Credit Societies	ib.
Difficulty of obtaining Money	615
Agricultural Banks and Credit Societies	ib.
Special Legislation necessary	ib.
Simplicity and Elasticity desirable	616
Objects of present Legislation	ib.
Unlimited Liability	617
Membership open to all	ib.
The Question of Residence	618
The Election of Members	ib.
Government Guidance and Control	ib.
Loans to be made to Members only	619
Agricultural Produce as Security	ib.
Jewellery as Security	ib.
Mortgages as Security	620
Limit on Number of Shares to be held	621
Official Audit	ib.
Financial Aid by Government	ib.
The People to be educated to the System	622

CHAPTER XIV.

FOREST ADMINISTRATION.

References	623
Forest Policy	ib.
History of Forest Administration in Burma	625
Abstract of the Burma Forest Act, 1902	628
Preliminary	ib.

CHAPTER XIV.—*Continued.*

	PAGE
Reserved Forests	630
Power to constitute Reserved Forests	<i>ib.</i>
Procedure, etc., on Proposal to constitute Reserved Forests	<i>ib.</i>
Constitution of Reserved Forests, and Powers, Rights, and Duties therein	631
Cessation of Reserve	632
General Protection, etc., of Forests and Forest Produce	<i>ib.</i>
Control of Forest Produce in Transit, etc.	634
Forest Officers	635
Organisation of the Forest Service	636
Regulations for the Appointment of Probationers to the Indian Forest Service, 1906	637
Appointments	<i>ib.</i>
Admission to Examination	<i>ib.</i>
Qualifying Examinations	<i>ib.</i>
Subjects of Examination	638
Medical Examination	<i>ib.</i>
Period of Probation	<i>ib.</i>
Charges	<i>ib.</i>
Course of Study	639
Conduct and Medical Requirements	<i>ib.</i>
Diploma of Forestry	<i>ib.</i>
Appointment and Seniority	<i>ib.</i>
Riding	640
Articles of Agreement	<i>ib.</i>
Allowance and Salary	<i>ib.</i>
Promotion, Leave, Pension	<i>ib.</i>
Syllabus of the Competitive Examination	641
Qualifying Examination in German	644
List of Appointments in the Upper Controlling Staff of the Indian Forest Service	<i>ib.</i>
Leave	645
Pensions and Provident Fund	646
The Work of the Forest Department	648
Reservation of State Forests	<i>ib.</i>
Area of Reserved Forests in Burma	650
General System of Exploitation	<i>ib.</i>
Extraction of Timber from the Forests of Burma, 1904	651
Management of the State Reserve Forests	<i>ib.</i>
Commercial Exploitation of the Burma Forests	653
Out-turn of Timber from the Forests of Burma	655
Out-turn of Minor Forest Produce and Fuel from the Forests of Burma,	<i>ib.</i>
The Finances of the Forest Department	<i>ib.</i>
Financial Results of Forest Administration	<i>ib.</i>
Details of Forest Revenue	656
Details of Forest Expenditure	<i>ib.</i>

CONTENTS OF VOLUME II.

vii

CHAPTER XV.

PUBLIC WORKS.

	PAGE
References	658
General Organisation of the Public Works Department	<i>ib.</i>
Accounts Branch	659
Scale of Pay in Accounts Branch	<i>ib.</i>
Appointments in the Accounts Branch	<i>ib.</i>
Executive Branch	660
Scale of Pay in Executive Branch	661
Appointments in the Executive Branch	<i>ib.</i>
Temporary Establishments	662
Classification of Public Works	<i>ib.</i>
Expenditure on Public Works, 1901-05	663
Works under the Buildings and Roads Branch	<i>ib.</i>
Military Works	<i>ib.</i>
Imperial Expenditure on Military Works, 1901-05	664
Imperial Civil Works	<i>ib.</i>
Civil Buildings, Provincial, Local, and Contribution	<i>ib.</i>
Expenditure on Civil Buildings, 1901-05, excluding Establishment Charges and the Cost of Tools and Plant	665
Communications	<i>ib.</i>
Expenditure on Communications, 1901-05, excluding Establishment Charges and the Cost of Tools and Plant	666
Miscellaneous Public Improvements	667
Expenditure on Miscellaneous Public Improvements, 1901-05, exclud- ing Establishment Charges and the Cost of Tools and Plant	<i>ib.</i>
Establishment, Tools, and Plant	668
Expenditure on Establishment, Tools, and Plant, 1901-05	<i>ib.</i>
Analysis of Public Works Expenditure	<i>ib.</i>
General Analysis of Public Works Expenditure in the Buildings and Roads Branch, 1901-05	669
Irrigation Works, General	<i>ib.</i>
Major and Minor Irrigation Works	<i>ib.</i>
Expenditure on Irrigation	<i>ib.</i>
Expenditure on Irrigation, 1901-05	670
Imperial Irrigation Works	<i>ib.</i>
The Mandalay Canal	<i>ib.</i>
The Shwebo Canal	671
The Mön Canals	<i>ib.</i>
Expenditure on Imperial Irrigation Works	<i>ib.</i>
Capital Expenditure on Imperial Irrigation Works in Burma to End of 1904-05	672
Minor Works and Navigation	<i>ib.</i>
Capital Outlay on Embankments	<i>ib.</i>
Revenue and Expenditure	673

CHAPTER XV.—*Continued.*

PAGE

Revenue and Expenditure of Minor Works and Navigation Works to the End of 1904-05 (excluding Capital Expenditure)	673
The Burma Railways, Historical	674
The Working of the Burma Railways	676
Length of Railways open on 31 March, 1905	677
The Railway Company's Contract	<i>ib.</i>
Finances of the Burma Railways, 1900-04	678

CHAPTER XVI.

MUNICIPAL ADMINISTRATION.

References	680
General Review of Municipal Affairs	<i>ib.</i>
Number and Population of Municipalities	681
Municipal Committees	<i>ib.</i>
Municipal Finance	682
Municipal Department	<i>ib.</i>
Incidence of Taxation	683
The Burma Municipal Act, 1898	<i>ib.</i>
Summary of the Burma Municipal Act, 1898	684
Preliminary	<i>ib.</i>
Constitution of Municipalities	<i>ib.</i>
Organisation of Municipal Committees	685
Constitution of Committees	<i>ib.</i>
President and Vice-President	688
Notification of Elections, Appointments, and Removals	689
Conduct of Business	690
Joint Committees	692
Defects in Constitution and Irregularities	<i>ib.</i>
Officers and Servants	<i>ib.</i>
Contracts and Transfers of Property	694
Acquisition of Land	695
Privileges and Liabilities	<i>ib.</i>
Taxation	696
Funds and Property	698
Powers for Sanitary and other Purposes	699
Offences affecting the Public Health, Safety, or Convenience	701
Control	<i>ib.</i>
Supplemental	706
Small Towns	<i>ib.</i>
Statistics of Municipalities	<i>ib.</i>
Number and Population of Municipalities, and Number of Members of Committee, 1901-05	707
Details of Municipal Revenue	<i>ib.</i>
Income of the Municipalities in Burma, excluding Rangoon, during 1901-05	708

CONTENTS OF VOLUME II.

ix

CHAPTER XVI.—*Continued.*

PAGE

Details of Municipal Expenditure	708
Details of the Expenditure of Municipalities in Burma, excluding Rangoon, during 1901-05	709
Rangoon Municipality, Details of Revenue	710
Income of Rangoon Municipality during 1901-05	<i>ib.</i>
Rangoon Municipality, Details of Expenditure	<i>ib.</i>
Expenditure of Rangoon Municipality during 1901-05	711
Town Funds	<i>ib.</i>

CHAPTER XVII.

VILLAGE ADMINISTRATION.

References	712
Origin of the Village System in Upper Burma	<i>ib.</i>
Minute by Sir Charles Crosthwaite	<i>ib.</i>
The Village System under Native Rule	713
Village Headmen	714
Leading Principle of the System	715
Difficulties encountered	<i>ib.</i>
The Village and not the Individual to be the Unit	716
The Upper Burma Village Regulation	717
Number, Powers, and Discipline of Headmen, 1904	718
Criminal Jurisdiction of Headmen	<i>ib.</i>
Civil Jurisdiction of Headmen	719
Return of Fines inflicted by Headmen and of the Revision of Headmen's Orders in 1904	720
Responsibility of Villagers in regard to Crime	<i>ib.</i>
Return of Fines imposed on Villages under the Lower Burma Village Act or under the Upper Burma Village Regulation, 1903, 1904	721
Village Headmen and their Duties	722
Appointment of Headmen and their local Jurisdiction	<i>ib.</i>
Remuneration of Headmen	<i>ib.</i>
Insignia of Office	<i>ib.</i>
Ywagaungs and Myothugyis	<i>ib.</i>
Education of Sons of Headmen	<i>ib.</i>
Power of Headman to enforce his Order	723
Duty of Headman in Respect of Reporting Crime	<i>ib.</i>
Duty of Headman as to Investigation of Crime and Arrest of Offenders, Resistance in Case of Attack	<i>ib.</i>
Keeping Roads open	724
Furnishing Supplies and Labour	<i>ib.</i>
Powers as Excise Officers	<i>ib.</i>
Duties in regard to Sanitation, Fires, and Cattle Disease	<i>ib.</i>
Rules regarding Village Sanitation, Slaughter of Cattle, and the Prevention of Fires	726
Rules for the Prevention of Cattle Disease	<i>ib.</i>

CHAPTER XVII.—*Continued.*

PAGE

Duties of Headmen as Revenue Officers	730
Duties in regard to Rights over Land	733
Miscellaneous Duties of Headmen	<i>ib.</i>

CHAPTER XVIII.

MEDICAL AND SANITARY ADMINISTRATION.

References	734
Classification of Hospitals and Dispensaries	<i>ib.</i>
Number of Medical Institutions in Burma	735
The Staff of the Medical Department	<i>ib.</i>
Superior Medical Officers	<i>ib.</i>
Subordinate Medical Officers	736
Civil Surgeoncies	737
Salaries in the Civil Medical Department	<i>ib.</i>
Monthly Pay of Officers of the Burma Civil Medical Department	<i>ib.</i>
The Work of the Medical Department	738
Number of Patients treated for the principal Diseases in the Hospitals of Burma, 1902-05	<i>ib.</i>
Surgical Operations	<i>ib.</i>
Surgical Operations performed in the Hospitals of Burma, 1902-05	739
The more important Operations performed in the Hospitals of Burma during 1905	<i>ib.</i>
Vaccination	<i>ib.</i>
Number of Persons primarily vaccinated in the Province of Burma, 1897-1906	740
Number of Deaths from Small-pox	<i>ib.</i>
Occurrence of Plague in Burma	<i>ib.</i>
Occurrence of Leprosy in Burma	741
The Rangoon Lunatic Asylum	<i>ib.</i>
Statistics of the Rangoon Lunatic Asylum during 1903-05	<i>ib.</i>
Expenditure on Medical and Sanitary Administration	742
Sanitary Administration	<i>ib.</i>
Expenditure on Civil Sanitary Works, 1902-05	744

CHAPTER XIX.

HARBOUR ADMINISTRATION.

References	745
The principal Ports of Burma	<i>ib.</i>
Value of Total Imports and Exports, exclusive of Government Stores and Treasure, into and from the Ports of Burma during 1904-05	746
Administration of Minor Ports	<i>ib.</i>
Rangoon Port Administration	<i>ib.</i>
Abstract of the Rangoon Port Act, 1905	747
Constitution of the Port Commissioners	748

CONTENTS OF VOLUME II.

xi

CHAPTER XIX.—Continued.

PAGE

Conduct of Business by the Commissioners	749
Borrowing Powers	752
Disposal of Funds	754
Annual Estimates and Accounts	755
Control of Government	757
Miscellaneous	758
The Finances of the Port of Rangoon	760
The Debt of the Port Commissioners	<i>ib.</i>
Sources of Revenue	<i>ib.</i>
Ordinary Revenue of the Rangoon Port Trust	<i>ib.</i>
Objects of Expenditure	761
Ordinary Expenditure of the Rangoon Port Trust	<i>ib.</i>

CHAPTER XX.

THE ADMINISTRATION OF THE SHAN STATES.

References	762
The Shan Country	<i>ib.</i>
The Shan People	764
British Occupation of the Shan States	766
General Progress	767
Medical Aid	768
Financial Affairs	<i>ib.</i>
Education of Chiefs' Sons	769
Criminal Justice	<i>ib.</i>
Permanence of British Rule	<i>ib.</i>
Products of the Shan States	770
Agricultural Products	<i>ib.</i>
Mineral Products	771
The Administration of the Shan States	772
The Northern Shan States	773
The Myelat and Southern Shan States	774
States under the Supervision of Commissioners	775
General Powers of the Government of Burma in the Shan States	<i>ib.</i>
The Northern and Southern Shan States	776
The Myelat	778
States under the Control of Commissioners	<i>ib.</i>
Work of Criminal Courts in the Shan States	779
Statistics of Crime in the Shan States, 1904-05	<i>ib.</i>
Work of Civil Courts in the Shan States	780
Statistics of Original Suits in the Civil Courts of the Shan States, 1904-05,	<i>ib.</i>
Statistics of Appeals in the Civil Courts of the Shan States, 1904-05	<i>ib.</i>
The Karenni States	781
Sanad granted to the Myoza of Kantarawadi, or Eastern Karenni	<i>ib.</i>

THE ADMINISTRATION OF THE CHIN HILLS.

	PAGE
References	783
The Chin Country	<i>ib.</i>
The Chin People	784
Division of the Chins	785
Chin Characteristics	<i>ib.</i>
Physical Development	<i>ib.</i>
Carrying Capacity	786
Personal Uncleanliness	<i>ib.</i>
Different Kinds of Villages	<i>ib.</i>
Jhoomers, or Taungya-cutters	<i>ib.</i>
Villages of raiding Tribes	787
Ordinary Villages	<i>ib.</i>
Plan of Villages	<i>ib.</i>
Water Supply	<i>ib.</i>
Village Defences	788
Trades and Industries of the Chins	<i>ib.</i>
Agriculture	<i>ib.</i>
Manufactures	789
Trade	<i>ib.</i>
British Occupation of the Chin Hills	790
The Chin Hills under Native Rule	<i>ib.</i>
Cause and Progress of British Occupation	<i>ib.</i>
Effects of British Occupation	791
The Administration of the Chin Hills	<i>ib.</i>
General Policy	<i>ib.</i>
The Chin Hills Regulation, 1896	<i>ib.</i>
Abstract of the Chin Hills Regulation, 1896	792
Headmen and their Powers	<i>ib.</i>
Jurisdiction and special Powers of Officers	793
Special Rules as to Arms, Ammunition, Opium, and Forests	797
Rules regarding Taxes and Realisation of Fines, etc.	<i>ib.</i>
Finance and Justice	798
Taxation	<i>ib.</i>
Civil and Criminal Justice	<i>ib.</i>

CHAPTER XXII.

THE TRADE AND SHIPPING OF BURMA.

References	799
Defects in Indian Trade Statistics	<i>ib.</i>
Aggregate Maritime Trade of Burma	800
The Foreign Import Trade	802
Value of Imports by Countries of Origin	<i>ib.</i>
Value of Imports of Principal Articles	804

CONTENTS OF VOLUME II.

xiii

CHAPTER XXII.—Continued.

PAGE

The Foreign Export Trade	808
Value of Exports by Countries of Destination	<i>ib.</i>
Value of Exports of Principal Articles	809
The Coasting Import Trade	811
Meaning of the Term "Coasting Trade"	<i>ib.</i>
Value of Coasting Import Trade by Country of Origin	813
Value of Imports of Principal Articles	815
The Coasting Export Trade	818
Value of Coasting Export Trade by Country of Destination	<i>ib.</i>
Value of Exports of Principal Articles	820
Import and Export of Government Stores	821
The Import and Export of Treasure	823
The Trans-frontier Trade	824
Value of the Trade by Countries	<i>ib.</i>
Imports and Exports of Principal Articles	825
Free and Dutiable Imports and Exports	827
The Shipping of Burma	<i>ib.</i>
The Foreign Trade	<i>ib.</i>
Nationality of Shipping in the Foreign Trade	828
The Coasting Trade	829
Nationality of Shipping in the Coasting Trade	830

APPENDIX M.

FINANCIAL AND POSTAL STATISTICS, AND TABLES OF LOCAL WEIGHTS AND MEASURES.

General Statement of the Gross Revenue and Expenditure of Burma under the Heads Imperial, Provincial, and Incorporated Local during the Years ending March 31, 1896-1905	835
Detailed Statement of the Gross Revenue of Burma under Each Main Head during the Years ending 31 March, 1896-1905	836
Detailed Statement of the Gross Expenditure of Burma under Each Main Head during the Years ending 31 March, 1896-1905	838
Revenue and Expenditure of the Indian Post Office Department in Burma during the Years ending 31 March, 1895-1904	840
Postal Statistics of Burma during the Years 1885-1904	841
Indian and Burmese Money, Weights, and Measures	842

APPENDIX N.

DETAILS OF THE OPIUM REGULATIONS.

Account of the Opium System in Burma, reprinted from the Report of the Philippine Opium Commission, 1905	845
Extracts from the Reports on the Administration of Burma, dealing with recent Changes in the Opium System	852

APPENDIX N.—*Continued.*

PAGE

Rules for the Manufacture, Possession, and Sale of Morphia in Burma, dated 19th September, 1905	854
Number of Persons arrested and convicted for Offences in regard to Opium and Hemp Drugs during the Years 1903-04 and 1904-05 . .	855

APPENDIX O.

DETAILS OF LAND REVENUE SETTLEMENT IN
LOWER BURMA.

Directions to Settlement Officers: Introduction	859
Demarcation of Lands Preliminary to Survey	860
The Survey	861
Crop-cutting and Statistics of Out-turn	863
Record of Rights and Occupation in Land	865
Inspection and Classification of the Land	874
Principles of Assessment and Settlement	878
Report of Proposals and Results	880
The Recess	882
Forms of Registers, Statements, and Reports	885

APPENDIX P.

STATISTICS OF LAND REVENUE, OF LAND HOLD-
INGS, AND OF AGRICULTURAL LOANS.

Ordinary Land Revenue	901
Capitation Tax	902
Land Rate in Lieu of Capitation Tax	903
Water Rate	<i>ib.</i>
Thathameda	904
Fishery Revenue	905
Miscellaneous Land Revenue	906
Revenue Proceedings against Defaulters	907
Sales, Mortgages, and Redemptions of Land	908
Classification of Occupiers of Land and Details of Tenancies at Full Rents	909
Agricultural Advances	910
Financial Results of Agricultural Advances made during the Five Years ending 31 March, 1905	911

APPENDIX Q.

FORESTRY STATISTICS.

Financial Results of Forest Administration	915
Out-turn of Timber and Fuel	<i>ib.</i>
Financial Results in Lower Burma	916

CONTENTS OF VOLUME II.

XV

APPENDIX Q.—Continued.

PAGE

Financial Results in Upper Burma	916
General Forestry Statistics	918
Details of Forest Revenue	<i>ib.</i>
Details of Forest Expenditure	920

APPENDIX R.

MEDICAL AND VITAL STATISTICS.

Number of Patients treated in the Hospitals	923
Expenditure on Medical and Sanitary Administration	924
Diseases treated in the Hospitals	925
Statistics of Vaccination	926
Statistics of Births and Deaths	927
Number of Deaths according to Age	928
Ratio of Deaths in each Thousand of Population	929

APPENDIX S.

STATISTICS OF THE TRADE AND SHIPPING OF BURMA.

Maritime Foreign Trade.

Total Value of Imports and Exports	935
Value of Free and Dutiable Imports and Exports	936
Value of Merchandise imported, by Countries of Origin	937
Value of the Principal Articles imported	939
Value of Merchandise exported, by Countries of Destination	941
Value of the principal Articles exported	943

Maritime Coasting Trade.

Total Value of Imports and Exports	944
Value of Merchandise imported, by Countries of Origin	945
Value of the Principal Articles imported	949
Value of Merchandise exported, by Countries of Destination	951
Value of the Principal Articles exported	955

Private Import and Export of Treasure.

Value of the Private Import of Treasure	956
Value of the Private Export of Treasure	957

Government Transactions.

Value of the Import and Export of Government Stores	958
---	-----

The Trans-frontier Trade.

Value of Imports, by Countries of Origin	959
Value of the Principal Articles imported	960
Value of Exports, by Countries of Destination	961
Value of the Principal Articles exported	962

Rice Trade Statistics.

Value and Quantity of Rice exported	963
---	-----

Teak Trade Statistics.

Value and Quantity of Teak exported	964
---	-----

APPENDIX S.—*Continued.*

PAGE

Shipping in the Foreign Trade.

Number and Tonnage of Vessels engaged	965
Number, Tonnage, and Nationality of Vessels entered	966
Number and Tonnage of Vessels which entered and cleared with Cargo and in Ballast	968

Shipping in the Coasting Trade.

Number and Tonnage of Vessels engaged	969
Number, Tonnage, and Nationality of Vessels entered	970
Number and Tonnage of Vessels which entered and cleared with Cargo and in Ballast	971
Number and Tonnage of Vessels entered with Cargoes, distinguish- ing Vessels entered in the external Coasting Trade and Vessels entered in the Inter-portal Trade within the Province	972

APPENDIX T.

CONTRIBUTION TO A BIBLIOGRAPHY OF BURMA.

Key to Abbreviations used in the Bibliography	975
History	977
Trade, Commerce, Industries, Products	980
Religion and its Semblances	982
Census Reports	983
Geography, Description, and Travel	984
Railways	989
Wars and Punitive Expeditions	990
The People of Burma: their Life, Manners, and Customs	992
Missions	993
Frontier Affairs	994
Karenni and the Karen People	995
The Kachin Hills and the Kachin People	996
The Shan States and the Shan People	<i>ib.</i>
Arakan and the Arakanese	997
The Chin Hills and the Chin People	<i>ib.</i>
Official Publications	998

APPENDIX U.

Glossary of Indian and Burmese Words used in these Volumes	1005
--	------

INDEX.

Index to Volumes I. and II.	1009
-------------------------------------	------

CHAPTER XI.

THE FINANCIAL SYSTEM

REFERENCES.

- Report of the Committee appointed [in 1892] to inquire into the Indian Currency. British Parliamentary Paper. C. 7060 of 1893. Folio. pp. 43.
- Report of the Committee appointed [in 1898] to inquire into the Indian Currency. British Parliamentary Paper. C. 9390 of 1899. Folio. pp. 27.
- Indian Expenditure Commission. Final Report of the Royal Commission on the Administration of the Expenditure of India. British Parliamentary Paper. Cd. 131 of 1900. Folio. pp. vi + 190.
- The Civil Account Code. Issued by the Authority of the Comptroller-General. Sixth edition, corrected to 15th September, 1902. 2 vols., pp. viii + 421 + xxii and vi + 423-960 + xxxiv. Calcutta, Govt. Press, 1902.

For further references consult the Bibliographical Appendix.

The unit of currency in Burma is the Indian rupee, the value of which is now fixed by law at one shilling and fourpence in British currency, equal to about thirty-two cents United States currency.

Although all the statistics of Burmese finance contained in the following chapter relate to years subsequent to the fixing of the value of the rupee by the Government of India, the currency question is one of such great importance that a brief account of the currency policy of the Indian Government may be included with advantage in this Report.

HISTORY OF THE CURRENCY QUESTION IN INDIA.

The following account of the currency question in India is taken, except where otherwise stated, from the Report of the Indian Currency Committee of 1893 (generally known as the Herschell Report) and from the Report of the Indian Currency Committee of 1898 (generally known as the Fowler Report). I shall deal elsewhere in this Report with the controversy which has raged for so many years in regard to currency in the Far East. For the present purpose it is sufficient to state briefly the considerations which determined the action of the Indian Government in regard to the currency of India, and, incidentally, of Burma.

In the Indian currency system, as established in 1835, and continued down to 1893, silver took the place which gold occupies in the English system. Cheques and other credit paper have not replaced the metallic currency in India to the same extent as has been the case in England and elsewhere. The Indian mint was open to the free coinage of silver, and the rupee and the half-rupee were legal tender to an unlimited amount. Gold was not a legal tender, and there were no current gold coins. Paper money could be issued up to a total sum of 80,000,000 rupees against securities, and beyond that only against a reserve of coin or bullion deposited. The amount of notes so issued up to the 31st of March, 1893, was Rs. 264,018,200, and the reserve against these notes was made up of: Coin, Rs. 175,385,744; Bullion, Rs. 8,682,456; Securities, Rs. 80,000,000. The average value of the rupee in London fell from 22·35 pence in 1874 to 14·98 pence in 1892.

This fall in the exchange value of the rupee caused the most serious financial embarrassment to the Indian Government.

Financial Difficulties
caused by the Fall in
the Value of the Rupee.

The Government of India has yearly to remit a large sum of money to England in discharge of its gold obligations. In 1893 the amount remitted was £16,532,215, which, at the average exchange of the year,—viz., 1s. 2·985d.,—required a payment of Rs. 264,784,150. If this could have been remitted at the exchange of 1874, it would have needed only Rs. 177,519,200. The situation created by the fall in the exchange value of the rupee is thus described by Sir David Barbour, Financial Member of the Council of the Governor-General of India from 1888 to 1893: "The immediate cause of our financial difficulties, and the cause which, by comparison and for the time being, dwarfs all others, is the fall in the gold value of silver, which has added to the Indian expenditure in two years more than four crores of rupees [Rs. 40,000,000]. If that fall could be stayed and the rate of exchange with England fixed permanently even at its present low figure, the difficulty of dealing with the present deficit would be comparatively light. If we could feel assured that there would be no further fall in exchange, I have little doubt that increase of revenue, restriction and reduction of expenditure, with possibly some taxation of a temporary nature, would in a very short time re-establish the equilibrium. . . . Our financial position for the coming year is at the mercy of exchange, and of those who have it in their power to affect the price of silver. If we budget for

the present deficit of Rs.15,951,000 and exchange rises one penny, we shall have a surplus; if it falls a penny, we shall have a deficit of more than three crores, [Rs. 30,000,000]. . . . It will be obvious, from what I have just said, that what we have to consider, in making our arrangements for next year, is not so much the question of increasing the public revenue or restricting that portion of the public expenditure which is under our control, but the chances of a settlement of the currency question."

The difficulties which the Indian Government had in meeting the home charges were aggravated by the fact that the fall in exchange led to claims on the part of its officers, civil and military, who received salaries in rupees, for compensation for the losses sustained by them, owing to the fall in exchange. Many of these officials were under the necessity of remitting considerable sums of money to England for the support of their families and the education of their children, and the fall in exchange materially reduced the purchasing power of the salaries of Indian officials. This hardship to salaried employees had been recognised by many mercantile houses, and in many cases exchange compensation had been allowed; and the Government of India, apart altogether from the justice and reasonableness of the claims of its servants, could scarcely turn a deaf ear to appeals which had been successful in the mercantile community.

The effect of the fall in exchange on the people of India and on the commerce of India is dealt with as follows in the Herschell Report:—

In estimating the effect upon the people of India of its being necessary to raise an increased number of rupees to meet the sterling remittances of the Government of that country, it must be borne in mind that the extent of the burden imposed upon the people of India by these remittances is measured by the quantity of produce which they represent, for it is by the export of produce that the debt is in reality discharged. In so far as the necessity of exporting more produce arises from the circumstance that gold prices are lower, the people of India are in the same position as those of Australia or any other country which has to export produce for the purpose of paying the interest on its gold debt. The question to be considered is, What effect has the fall in exchange upon the amount of produce which must be exported to meet a given gold liability? To determine this, the gold price of the produce must be assumed to be stationary. When silver falls in relation to gold, the greater number of rupees which is

Effect of the Fall of
Exchange on the Export
of Produce.

Government of that country, it must be borne in mind that the extent of the burden imposed upon the people of India by these remittances is measured by the quantity of produce which

they represent, for it is by the export of produce that the debt is in reality discharged. In so far as the necessity of exporting more produce arises from the circumstance that gold prices are lower, the people of India are in the same position as those of Australia or any other country which has to export produce for the purpose of paying the interest on its gold debt. The question to be considered is, What effect has the fall in exchange upon the amount of produce which must be exported to meet a given gold liability? To determine this, the gold price of the produce must be assumed to be stationary. When silver falls in relation to gold, the greater number of rupees which is

required to meet a given gold payment will not represent a greater quantity of produce than before, if the silver price in India of the produce exported responds to the changed value of silver in relation to gold; *i.e.*, if it has risen, or has been prevented from falling. Silver prices must ultimately thus respond, although an interval may elapse before the correspondence is complete; and during this time, whilst more produce is exported, the Indian ryot is getting proportionately less in silver for his produce. It has indeed been alleged that the fall in the gold price of certain Indian products is to be attributed to the fall in the value of the rupee, but this allegation is strongly controverted; and, having regard to the phenomena presented in the case of Indian products not generally open to competition, and to the necessary effect of competition in the case of those which are within the sphere of its influence, it seems far from clear that the fall in the gold price of Indian products would have been materially less if the exchange had not fallen. Even if the burden upon the people of India as a whole has not been increased by the fall in exchange, there can be no doubt that it has been to some extent shifted from one class to another. The burden of those who pay a fixed land revenue under a permanent settlement has been lightened, and the same may be said of all those whose land revenue has not been re-settled in recent years, or re-settled with adjustment to meet the most recent conditions. On the other hand, the increased salt tax presses upon the people at large, and renders more heavy the taxation of those who, for the most part, have suffered rather than benefited from the higher rupee prices due to the fall in the gold value of silver.

We pass now to consider the manner in which the commerce of India is alleged to have been injuriously affected by the variations in exchange. It

General Effect of the Fall of Exchange on Indian Commerce.

is said that legitimate trade is replaced by mere speculation and gambling. There seems to be a common agreement amongst those who differ in their views upon almost all other points, that trade is seriously harassed by these fluctuations, though the estimates do not all agree as to the character and the extent of the inconvenience arising from this cause. It does not appear to be certain, even in the view of those who are most strongly sensible of the mischievous effect of fluctuations of exchange, that the volume of trade over a series of years has been diminished by this cause, though there seems a common agreement that any sudden or violent fluctuation almost paralyses business for a time. It is to be observed that it is not so much the fall of exchange which is complained of as the fluctuations, whether in one direction or the other. Some of those who admit the mischief to trade of exchange fluctuations allege that the extent of the mischief is not serious, since provision can be largely made against the effect of those fluctuations through the medium of banks; but it is clear that the traders cannot completely safeguard themselves in this way, and that such security as they obtain must be paid for.

Upon the whole, it cannot be doubted that it would be well if commerce were free from the inconvenience of fluctuations which arise from a change in the relation between the standard of value in India and in countries with which the commerce is transacted. It must not be assumed that the adoption

of the same standard for the United Kingdom and India would remove all the disquieting causes of the disturbance of trade of which complaint is made. If the commodity which lies behind the exchange transaction is one that continues to fall in relation to gold, the risk which arises from bargains in a falling market will still be present. The liability of the standard of the one country to fall, in relation to the other, causes, however, an additional risk, and consequently increased disturbance of trade.

It is said that the tendency of a falling exchange is to stimulate exports; that, inasmuch as more silver (*i.e.*, a higher silver price) is received in respect

**Alleged Effect of the
Fall of Exchange on
the Volume of Imports
and Exports.**

of the same gold price, whilst wages and the other factors in the cost of production do not increase in the same proportion, production becomes more profitable, and is therefore stimulated. Assuming this to be true, the effect of

each successive fall must be transitory, and can continue only until circumstances have brought about the inevitable adjustment. Although one may be inclined, regarding the matter theoretically, to accept the proposition that the suggested stimulus would be the result of a falling exchange, an examination of the statistics of exported produce does not appear to afford any substantial foundation for the view that in practice this stimulus, assuming it to have existed, has had any prevailing effect on the course of trade. On the contrary, the progress of the export trade has been less with a rapidly falling than with a steady exchange.

It is said, too, that, whilst a falling exchange tends to stimulate exports, there is a corresponding tendency to check imports. Here, again, statistics do not seem to show that diminished imports have been coincident with a lower exchange.

Upon the whole, we cannot see any evidence that the effect of a falling exchange on the country at large, in influencing either exports or imports, has over a series of years been very considerable. Some trains of *a priori* reasoning would seem to lead to the same conclusions, and also to the further conclusion that, even if a fall in the gold value of the rupee does stimulate exports, the result is not necessarily to the benefit of India as a whole, though it may temporarily benefit the employer at the expense of the wage-earner, because wages rise more slowly than prices.

The want of a stable exchange between England and India, and the fact that it has fallen so heavily, has, it is alleged, greatly checked the investment

**Effect of the Fall of
Exchange upon the Invest-
ment of Capital in India.**

of British capital in India, and the development of the country which would have been the fruit of such investments. London is the leading market, and London

thinks in gold. London is ready enough to lend upon contracts for repayment in gold, but hesitates to enter upon silver transactions or to engage in industrial enterprises in a silver country. There can be no doubt that uncertainty as to the interest which would be received for the investment, and as to the diminution which the invested capital might suffer if it were desired to retransfer it to England, tends to check British investments in India. This is a real evil, the importance of which we do not desire to underrate.

It has been pointed out, however, that a great number of industrial enterprises have been established in India during recent years, such as collieries, cotton mills, jute mills, woollen mills, and paper mills, in which much capital has been invested; and that large sums have been spent upon tea plantations is evidenced by the enormous increase in the quantity of tea grown in and exported from India. And it must be remembered that the adoption by India of the same standard which exists in England might not remove all obstacles to the investment of capital in that country. Capitalists have, of late, been slow to invest in many kinds of industrial enterprise, owing to the fact that prices are falling, or have fallen, very generally. If a gold standard were adopted for India, and similar phenomena of falling prices ensued there, capitalists might still be unwilling to provide capital for industrial enterprises. In connection with the point under discussion it may be well to observe that a falling exchange, owing to its effects upon their salaries, savings, and pensions, renders it more difficult to procure and arrange for the services of the European employees required for the carrying on of industrial undertakings in India.

So far, we have dealt only with the past. We have now to consider the effect to be anticipated from a continued, and not improbably heavy, fall in the exchange between India and England.

Probable Effects if the Fall in Exchange should continue. All the evils to which attention has been called would of course be aggravated and intensified. If prices continued to rise, while

wages were more slowly advanced, the material condition of the wage-earning class would be continually deteriorating. As respects the Government, we have already pointed out that, if no change be made in the currency arrangements of the country, and a heavy fall were to take place, such as we have referred to as possible, they would, unless they could largely reduce their expenditure, be compelled, in order to meet the increased demands upon them, to impose increased taxation to a very serious extent. It has been suggested that economy in the civil and military administration of India is still possible,—a point which does not fall within the scope of our inquiry; but, even assuming that the expenditure of the Indian Government might without impairing efficiency of administration be diminished, it cannot be supposed that this could be done suddenly to a very great extent, so as to meet the anticipated difficulty. When we pass to consider whether the revenue required to meet the deficiency might be raised by increased taxation, we encounter at once a position of great delicacy. There is no doubt that in several directions increased taxation is possible, but the difficulties connected with it are grave, and its political danger is said to be a matter of serious moment.

With these and a great mass of other facts before it the Indian Currency Committee of 1893 supported the proposals made by the Government of India in June, 1892, to close its mints to the free coinage of silver and to make arrangements for the introduction of a gold standard.

The recommendations contained in the Herschell Report having been approved by the Imperial and Indian Governments,

Action following the
Issue of the Herschell
Report.

there was passed on the 26th of June, 1893, by the Governor-General of India in Council, an Act providing for the closing of the Indian mints to the free coinage of both gold and silver, the Government retaining the power to coin silver rupees on its own account. Arrangements were made for the receipt of gold at the Indian mints in exchange for rupees at a rate of 16*d.* per rupee; for the receipt of sovereigns and half-sovereigns in payment of sums due to the Government at the rate of Rs.15 for a sovereign; and for the issue of currency notes to the Comptroller-General in exchange either for British gold at the above rates or for gold bullion at a corresponding rate.

The above action did not have the effect of making gold a legal tender in India, nor did it establish any legal relation between rupees and gold. But, as the Government declared, until further notice, a rate at which rupees could be purchased for gold coin or bullion, and expressed its readiness to receive gold in payment of public dues, the practical result was to determine the maximum limit to which the sterling exchange could rise.

The desire of the Indian Government, however, was to establish a gold standard in India, and to fix definitely the gold value of the rupee; and in a despatch dated March 3, 1898, proposals having this end as an object were submitted to the Secretary of State for India. These proposals were examined by the Currency Committee of 1898, of which Sir Henry Fowler was chairman; and, although the Fowler Report dissented in some particulars from the methods of action suggested by the Government of India, it acquiesced in the general proposals, and an Act of the Indian Legislature was passed in 1898, declaring that English gold coin should be legal tender in India at the rate of fifteen rupees for one sovereign. The value of the rupee was thus definitely fixed at 1*s.* 4*d.* (equal to about thirty-two cents United States currency). Although gold and notes are legal tender in India, the metallic currency in ordinary use is the silver rupee, which is legal tender to an unlimited amount. The Government makes a fair profit on the coinage of silver, and these profits are not treated as revenue, but are held as a gold reserve fund available for the maintenance of exchange.

The Currency Committee
of 1898, and the Final
Action on Indian Currency.

value of the rupee; and in a despatch dated March 3, 1898, proposals having this end as an object were submitted to the Secretary of State for India.

These proposals were examined by the Currency Committee of 1898, of which Sir Henry Fowler was chairman; and, although the Fowler Report dissented in some particulars from the methods of action suggested by the Government of India, it acquiesced in the general proposals, and an Act of the Indian Legislature was passed in 1898, declaring that English gold coin should be legal tender in India at the rate of fifteen rupees for one sovereign. The value of the rupee was thus definitely fixed at 1*s.* 4*d.* (equal to about thirty-two cents United States currency). Although gold and notes are legal tender in India, the metallic currency in ordinary use is the silver rupee, which is legal tender to an unlimited amount. The Government makes a fair profit on the coinage of silver, and these profits are not treated as revenue, but are held as a gold reserve fund available for the maintenance of exchange.

The following table shows the fluctuations in the exchange value of the rupee from 1873 down to 1899:—

AVERAGE RATE PER RUPEE AT WHICH BILLS AND TELEGRAPHIC TRANSFERS ON INDIA WERE SOLD BY THE SECRETARY OF STATE.					
<i>Year.</i>	<i>Pence.</i>	<i>Year</i>	<i>Pence.</i>	<i>Year.</i>	<i>Pence.</i>
1873 . . .	22.754	1882	19.895	1891	18.089
1874 . . .	22.351	1883	19.925	1892	16.733
1875 . . .	22.156	1884	19.536	1893	14.985
1876 . . .	21.626	1885	19.308	1894	14.574
1877 . . .	20.508	1886	18.254	1895	13.101
1878 . . .	20.791	1887	17.441	1896	13.638
1879 . . .	19.794	1888	16.898	1897	14.451
1880 . . .	19.961	1889	16.379	1898	15.354
1881 . . .	19.956	1890	16.566	1899	15.978

THE FINANCIAL MACHINERY OF THE INDIAN GOVERNMENT.

Burma, being a Province of British India, falls within the operation of the general financial machinery of India, but enjoys, nevertheless, a certain degree of independence in financial matters.

The fact that the financial machinery of Burma is part of the general financial machinery of the Indian Government makes it necessary to give a brief account of the latter.

The following description of the general financial machinery of the Indian Government is taken from the Final Report of the Royal Commission on the Administration of the Expenditure of India, Parliamentary Paper, Cd. 131 of 1900:—

Responsibility for the administration of Indian revenues is vested by Act of Parliament in the Secretary of State in Council, and the Secretary of State

is answerable to Parliament for the exercise of that responsibility.

Expenditure in India is incurred under rules approved by the Secretary of State in Council. A

limited discretion has been delegated to the Government of India; but, apart from that discretion, no new expenditure may be incurred without his sanction. He reviews the annual estimates and accounts of income and expenditure, and gives directions upon them to the Government of India.

All expenditure in England out of Indian revenues is paid on the authority of an order of the Secretary of State in Council. The establishment of the

India Office is regulated by Orders in Council. The discretion of the Secretary of State in Council in respect of

other expenditure in the United Kingdom is unlimited, subject, of course, to the supreme control of Parliament. The services paid in England are as follows:—

1. The interest and management of debt and interest and annuities payable to railway companies.
2. Payments due in England on account of civil administration of India.
3. Postal subsidy and telegraph charges.
4. Payments to the Admiralty for naval services in India.
5. Charges for the Persian mission and diplomatic and consular establishments in China, and pensions to the families of Maharajah Duleep Singh, and of the Nawab Nazim of Bengal, etc.
6. Charges of the India Office.
7. Payments to the War Office on account of the home charges of British troops serving or having served in India.
8. Payments for the transport of troops to and from India.
9. Payments for stores for India.
10. Furlough pay to officers on leave from India.
11. Pensions of retired officers and their families.

These payments are charged against the revenue of the year. The India Office makes in addition large payments on account (1) of capital expenditure for railways and irrigation works, (2) of stores for railway companies, provincial and local funds, and native states, (3) of remittances of various kinds.

A Committee of the Council and a Department of the India Office under the Financial Secretary are charged with the examination and consideration

Administrative Procedure in the India Office.

of proposals involving expenditure, whether initiated in England or in India. Questions connected with the increase or decrease of taxation, or questions touching, even indirectly, the finances of India, are also scrutinised by them from a financial point of view before these questions are referred by the Secretary of State to the Council for decision.

Large questions affecting the revenues, such as revision of settlements and rates of taxation, are considered by another Committee of the Council and by the Revenue Department of the India Office.

The expenditure on stores is under the control of a separate Committee of Council and of the Store Department.

The funds for the payment of the home services chargeable against revenue are supplied in the main by the sale in London of bills on the Government of India. A balance is kept sufficient to meet disbursements as they fall due, and any part of this balance not immediately required is temporarily invested.

The estimates of the Home Government for the ensuing year are prepared by the Accountant-General of the India Office in November, and, when ap-

Home Estimates.

proved by the Secretary of State in Council, are forwarded to India early in January. Communications follow between the Government of India and the Home Government, and the latest figures are telegraphed to the Government of India early in March.

The home accounts of the Secretary of State in Council are examined by an auditor, appointed under Act of Parliament, who holds office during good behaviour. He is nominated by the Secretary of State,

Audit of Home Accounts.

the Chancellor of the Exchequer having a right of veto. The Act creating the office of Auditor empowers the King to appoint by warrant, countersigned by the Chancellor of the Ex-

chequer. The minister who countersigns the Royal sign manual is responsible for the appointment; and it has been questioned whether the Chancellor of the Exchequer ought not to make the nomination.

ORGANISATION OF THE FINANCE DEPARTMENT.

In India the ultimate control of finance rests with the Governor-General in Council. He is advised on financial questions by the Financial Member of Council, the Indian Chancellor of the Exchequer. The Financial Member of Council presides over the Central Finance Department at Calcutta. A large staff of Imperial officers is employed under him, viz.:—

(1.) At the headquarters in Calcutta—

The Secretary of the Government of India in the Finance Department.

The Comptroller and Auditor-General.

The officers of the Financial Secretary, and of the Comptroller and Auditor-General.

(2.) In the Provincial Governments—

i. At the headquarters of the Province, the Civil Accountant-General, called "Comptroller" in the smaller Provinces.

Under him a staff of examiners and their subordinate officers.

ii. In the Provinces—

The officers in charge of the district treasuries, so far as their duties are treasury duties.

The revenue in India is not, as in England, remitted to one central bank, and the disbursements of the military, civil, public works and other services are not defrayed from one central chest or

District Treasuries. bank. Each district, as far as possible, provides its own ways and means.

The starting-point, therefore, of the Indian financial system is the district treasury, which receives the revenue of all kinds collected within the district, and makes, directly or indirectly, all payments for services, including the cost of collecting the revenue, which fall due within the district.

Each district treasury is in the charge of one of the officers on the staff of the collector of the district. This officer usually performs duty as an assistant collector of revenue, and is a magisterial officer as well as a treasury officer. In the latter capacity he is subordinate to the Civil Accountant-General of the Province, to whom he renders accounts, and under whose instructions he makes his disbursements. It is the duty of a treasury officer to provide for the payments belonging to his district, to apply to the Accountant-General for a remittance, if necessary, and to remit moneys not needed for the service of his district to other district treasuries as the Accountant-General may direct. The remittance of funds to and from a treasury lies entirely with the Accountant-General of the Province.

The orderly administration of Indian finance depends greatly on the manner in which the district treasuries are regulated and controlled, and upon the speed and accuracy with which accounts are submitted by the district treasuries to, and are analysed and consolidated by, (1) the Civil Accountant-General at the headquarters of the Province, and (2) the Finance Department at Calcutta.

FUNCTIONS OF THE FINANCE DEPARTMENT IN RELATION TO THE COLLECTION OF REVENUE.

In the United Kingdom the Chancellor of the Exchequer is the responsible and active chief of the revenue administration. The two great revenue

**Revenue System
of India compared
with that of the
United Kingdom.**

boards, which manage and control the collection of taxes throughout the kingdom, sit in London, and their chairmen are in constant communication with him. He answers in Parliament for their acts, and appeal from their decisions lies to him, as wielding

the powers of the Board of Treasury. The Post Office, including the Telegraph Department, the Woods and Forests, the Mint, and other minor revenue offices, are also subject to him financially. The returns furnished to him weekly, monthly, and quarterly, enable him to follow closely fluctuations in receipts, and he has at hand the heads of the revenue offices to assist him in ascertaining the causes of fluctuation and in forecasting the progress of his receipts. Further, he has, in intercourse with the chief expert officers, ample opportunity for learning defects in revenue laws or in the administration of the revenue department. Thus he is not only invested with the authority of Chief Officer of the Revenue, but he has the means of exercising that authority directly and effectively, and the personal impress which Chancellors of the Exchequer have left on the financial administration of the present century shows that centralisation of power has enabled holders of the office to discharge effectively the powers intrusted to them. The Chancellor of the Exchequer works the financial machine himself.

The revenue system of India is organised upon a different principle. Owing to the vast extent of territory and the necessary partition of the country into separately organised Provinces, the Finance Minister has not to the same degree as the Chancellor of the Exchequer direct control over the departments intrusted with the collection and management of the revenues. For the same reason his sources of information are not as easily or as immediately accessible. The larger area over which his operations extend makes it impossible for him to learn details by correspondence, by summoning officers from distant centres, or by visiting them himself, as speedily as is possible within the narrower limits of the United Kingdom. But, although centralisation in finance suits a comparatively small and homogeneous State, decentralisation is more convenient for an immense territory, and for races varying in religion, in language, and in degrees of civilisation. Sir D. Barbour says, in illustration of this point, that Europe could not be governed in detail from one capital, and Lord Cromer contends that it is impossible for one central authority to enforce economy on a continent such as India.

The Indian revenue system indeed varies from the English at almost every point. One law on customs, excise, and stamps applies, with a few exceptions, to the whole of the United Kingdom. In India the laws under which the revenue is collected vary to a certain extent in the different Provinces, so that there is not one excise law, or one salt duty law, applicable to the

Empire. It is, of course, the duty of the Central Government to take precautions against such variation giving rise to financial embarrassment. No change, therefore, can be made in taxation or in any existing system of revenue management without the approval of the Central Government, and it may be added that proposed alterations in the revenue laws are usually submitted for the criticism of local bodies affected by them before they are submitted to the Legislative Council for enactment. Again, in the United Kingdom the Revenue Administration is centralised, as we have stated, under the Chancellor of the Exchequer in London.

In India the administration of some branches of revenue is centralised, though not always under the Finance Minister. That of other branches is decentralised. The Land Revenue, representing a third of the net revenue of the State, is under the control of a central department at

**Brief Outline of the
Indian Revenue System.**

Calcutta, but that department is subject not to the Finance Minister, but to the Minister in charge of the Home and Revenue Departments. The Telegraph Department is under the Minister of Public Works. The Central Government controls the collection of part of the salt duty and of part of the opium revenue, of the Post Office revenue, and of other revenues. On these heads the Finance Minister can get information either directly or through his colleagues from expert officers in Calcutta. The remainder of the revenue is collected by the Provincial Governments, and the collecting authorities vary in the different Provinces. In Bombay there are Commissioners of the Land Revenue, a Commissioner of Customs, Salt, Opium, and Excise, and a Superintendent of Stamps. In Madras a Board of Revenue administers customs, salt, and excise. In Bengal and the North-west Provinces there are also Boards of Revenue. In the Punjab there is a Financial Commissioner and a Settlement Commissioner, in Burma there is a Financial Commissioner, and in the Central Provinces there is an Excise Commissioner and also a Superintendent of Stamps. As regards, therefore, a large portion of the revenue, the Provincial Governments are units of administration, and are efficiently equipped for their duties. The Finance Minister corresponds with these officers officially through the Provincial Governments. On questions of great importance he may have to visit the Provinces himself, and confer on the spot with the revenue authorities and public bodies, as Mr. Wilson did in 1860 when maturing his scheme of an income tax, and as Sir James Westland did when the re-imposition of the cotton duties was under consideration.

The revenues collected under these different authorities are paid, as we have said, by the collecting officers into the nearest district treasury, and the officer in charge of that treasury reports at the commencement of each month the amount of his receipts in the preceding month. Later in the month he sends forward a further and more detailed account of those receipts. Both accounts are addressed to the Accountant-General at the headquarters of the Province. The Accountant-General consolidates the accounts as they are received into one account for all the district treasuries under him, and he forwards it to the Comptroller and Auditor-General at Calcutta, who lays it before the Finance Minister. Thus the Finance Minister learns early

in the month his gross receipts up to the close of the preceding month, and later in the month he learns the particulars under general heads; but he only learns the fact that certain sums have been paid into the treasuries under the heads of Customs, Excise, or other branches of revenue, for the officers in charge of the district treasuries, from whom he derives his information, are merely bankers, and can give no explanation about the sums paid over to them. Such explanation must be furnished by the collecting departments. The Accountants-General are instructed to inform the Finance Minister monthly, through the Comptroller-General, of any large increase or falling off in the revenue, and they furnish monthly to the Comptroller-General a resource estimate, which gives for the current month and the next two months a forecast of expected receipts, as far as can be gathered from the latest facts then available.

The estimates of revenue required for the Budget are framed by the departments responsible for the various heads of revenue, and are forwarded by them to the Central Finance Department. The estimate of each branch is finally decided by the Finance Minister in communication with the department concerned.

THE FUNCTIONS OF THE FINANCE DEPARTMENT IN RELATION TO EXPENDITURE.

The rules governing the preparation of the estimates and accounts and the expenditure of money by public accountants are contained in the Civil, Public Works and Military Account Codes.

Civil Expenditure.

A Treasury officer may not make any payment unauthorised by the Code, unless under an express order from the Government, and he must enforce any order from the Civil Accountant-General disallowing a payment. If the Provincial Government overrules the Accountant-General, even temporarily, reference must be made to the Government of India.

Payments by the Finance Department from the district treasuries are either final payments or imprests. They are made through four different channels, viz.:—

Payments on account of Civil Administration for which the Central Government is responsible.

Payments on account of Civil Administration for which the Provincial Governments are responsible.

Payments for Public Works.

Payments for Military Services.

The greater part of the payments made by the district treasury officers for civil services are of a simple character and final. That is to say, they are made to the persons actually entitled to the money; *e.g.*, an officer to whom salary is due, a merchant who has supplied goods. In these cases the district treasury officer produces to the Auditor the final proof of payment. As soon as the Budget is passed, the Imperial Departments and the Provincial Governments are informed of the amounts granted to them, and they authorise the disbursing officers to incur expenditure within the limits of the grants.

The district treasuries are authorised to honour the orders of the disbursing officers within the limits assigned to them. Special authority is required for expenditure in excess of the Budget grants.

As soon as the Budget is passed, the Finance Department informs the Public Works Department of the sums appropriated to each Province and each work. The chief officer of account in the Public Works Department of the Province sends monthly to the Civil Accountant-General in the Province a statement of the amount required for public works in each district of the Province, and the Accountant-General directs the officers of the various district treasuries to issue those amounts, satisfying himself that the demands are in accord with the total sum assigned and with the general scheme of work mapped out for the Province.

Any excess over the budget grant requires the special sanction of the Government of India, but discretion is given to the Civil Accountant-General to authorise a credit in anticipation of sanction, should he consider that there is sufficient reason for such a course.

India is divided into four military commands. The Controller,* or chief military financial officer, at the headquarters of each command is apprised by the Military Department at Calcutta of the sums granted in the Budget for military service in his command, and he fixes, in concert with the Civil Accountant-General, the sums for which the military disbursing officers in the command may draw monthly upon the several district treasuries within the Province. The Civil Accountant-General authorises the treasury officers at those treasuries to honour the drafts up to the specified amounts.

In cases of extreme urgency a supplementary credit may be opened with the district treasury on the authority of the officer commanding the station. A credit of this kind is brought to the notice of the Civil Accountant-General in the monthly treasury accounts.

In all these cases the cash required for the public service is obtained from the district treasury.

For a large part of the payments in the Public Works and Military Departments the district treasuries make imprests or advances to the disbursing officers. The disbursing officers in these cases make the actual payments, and produce the vouchers in support of them.

Cash is not allowed to accumulate in a district treasury, and money not required in the district is remitted, either in actual coin or by means of bills bought from local traders, to a central treasury, where payments are large and where money is wanted. The movement of funds was formerly a source of expense to the Government, but of late years the sale of bills has considerably increased, and the favourable terms on which they are bought has converted the charge into a profit. Thus in 1883-84 the movement of funds cost the Government net nearly Rs. 80,000: in 1893-94 it realised for the Government a net profit of nearly Rs. 100,000.

The district treasuries (with a few exceptions) are in telegraphic commu-

* In India the civil officer is written "Comptroller," the military officer "Controller."

nication with the Civil Accountant-General of the Province. He is informed twice a month of the actual amount of the balances in each district treasury, and he also receives a monthly estimate from each treasury of the probable receipts and issues of the current and two succeeding months. On this information he directs the transfer of funds from surplus to deficit treasuries.

The Civil Accountants-General at the headquarters of the Provinces receive on the 2nd of each month from the district treasuries in their respective

**Accounts of
District Treasuries.**

Provinces an abstract of their accounts for the preceding month, and also a statement of cash balances in the treasuries. The Accountants-General examine and consolidate these accounts, and telegraph the consolidated results on the 8th to the Comptroller-General in the Finance Department at Calcutta. A few days later the Accountants-General receive from the treasuries fuller details of the chief heads of civil expenditure, and of the net imposts to the Military and Public Works Departments for the preceding month, and they forward the results by the 16th of the month to the Comptroller-General. On their side the disbursing officers of the Works and Military Departments report to the chief officer of accounts in their respective departments at the headquarters of the Province or Command the heads of their expenditure in the preceding month. The chief officers of account report the total receipts and expenditure of their respective services to the Works and Military Accounts Departments at Calcutta, and these departments forward consolidated accounts of the total Military and Public Works expenditure to the Comptroller and Auditor-General in the Finance Department at Calcutta.

The Comptroller and Auditor-General lays before the Financial Member of Council on the 9th of each month a summary of the issues throughout India during the preceding month, and of the cash balances remaining in the treasuries. On the 16th he lays before his chief a fuller detail of the civil expenditure, and by the close of the month full statements of the Public Works and Military expenditure.

From these returns the Financial Member of Council learns early in the month the total issues of the Indian Empire up to the close of the preceding month; and fairly complete information in detail of his expenditure up to that date is furnished to him by the close of the month.

On the 25th of the month the Comptroller and Auditor-General submits to the Financial Member of Council an estimate (the "Resource Estimate") of the probable payments and the cash balances of that month and the two succeeding months, and thus the Financial Member is kept closely informed of the coming requirements of the whole Indian Empire.

The estimates and accounts of Indian revenue and expenditure centre in the office of the Comptroller and Auditor-General. He consolidates and, so to speak, focusses the information for the use of the Financial Member and of the Government of India.

The Accountants-General are instructed to inform the Comptroller and Auditor-General monthly of any excessive proportionate outlay under any

grant, and of any important differences which are anticipated between actual expenditure and the budget estimates; and the duty is impressed upon the Accountants-General to immediately warn the Local Government, or the department concerned (if the administration is Imperial), of the first appearance of excess of outlay under any grant.

We come now to the preparation of estimates of expenditure. New and extraordinary services and proposed additions to, or reductions of, the estimates for the coming year are discussed by the heads of the departments and the Finance Member of Council, either before or during the preparation of the estimates. The departments throughout India prepare in the autumn their estimates for the year beginning on the following 1st of April.

Estimates. The departments and the Finance Member of Council, either before or during the preparation of the estimates. The departments throughout India prepare in the autumn their estimates for the year beginning on the following 1st of April.

1. The estimates of civil expenditure under the charge of the Central Government are framed by the officers immediately responsible for the administration of that expenditure. They are submitted to the Comptroller-General in the Finance Department, and are forwarded by him to the Secretary in the Finance Department by the middle of January. The Financial Member of Council then considers and approves them.

2. The Provincial Governments are responsible for the estimates of revenue and expenditure under their control, but their estimates are subject to examination by the representative in the Province of the Central Finance Department,—viz., the Accountant-General,—who may give advice, but may not alter the figures in the estimates without the consent of the Provincial Government. The Provincial Governments, after considering the comments of the Accountant-General, forward their estimates to the Central Finance Department at Calcutta about the middle of January. The Finance Department, in communication with its Accountants-General and with the Provincial Governments, considers the estimates with special reference to the rules under which the Provinces administer revenue and expenditure, and to the probability of the estimates of revenue being realised, but it does not interfere with the discretion of the Provincial Governments in details. The Provincial estimates are finally approved by the Financial Member of Council.

3. The Public Works Department submit their estimates to the Finance Department by the end of February. They are examined in the Finance Department by the Comptroller-General, and are finally approved by the Financial Member.

4. The Military Department submits the military estimates to the Finance Department by the end of February. They are examined by the Comptroller-General, and finally approved by the Financial Member.

The Comptroller and Auditor-General* in the Finance Department consolidates the estimates thus forwarded into the Budget for the ensuing year, adding his own estimates for services (such as the Public Debt) for which he is responsible.

The Budget in complete form is then submitted to the Financial Member, and, as approved by him, is laid before and passed by the Governor-General

* The Secretary in the Finance Department also compiles an independent set of the budget estimates for the Financial Member.

in Executive Council. The financial year in India terminates, as in England, on the 31st of March, and the Budget, containing estimates for receipts and issues *during* the year, is usually opened by the Financial Member in the Legislative Council of the Governor-General in the last week of March. This date is determined partly by the fact that the Government removes soon after that time from Calcutta; but there is administrative convenience in passing the estimates for the coming year before the close of the expiring year. The Legislative Council does not vote the Budget. It can comment upon it, but it may not alter or amend it.

When the Budget has been approved by the Governor-General in Council, the Finance Department informs the different departments that the sums approved have been placed at their disposal, and credits are then opened in the disbursing offices. After the close of the financial year the Comptroller and Auditor-General prepares the Finance and Revenue Accounts which give in detail the income and expenditure of the Indian Empire during the expired year.

FUNCTIONS OF THE PUBLIC WORKS DEPARTMENT IN RELATION TO EXPENDITURE.

The Public Works Department is responsible for the erection and repair of public buildings, for the construction and maintenance of roads and canals, and for the construction and superintendence of railways and irrigation works. Expenditure on works is either Imperial or Provincial. The Imperial Government executes and pays for "Imperial works," often employing a Provincial Government as its agent. The Provincial Governments execute and pay for "Provincial works." Works estimated to cost over Rs. 1,000,000, or, if rolling stock and the like charges are included, Rs. 1,250,000, require the sanction of the Secretary of State. Works in Madras and Bombay, estimated at more than Rs. 200,000, and in other Provinces at smaller amounts proportionately, require the sanction of the Government of India.

The cost of military works is defrayed, not from the military budget, but from the public works budget. All important military works are executed

Military Works. by a separate department under the Director-General of Military Works, who frames the estimate for this branch of service, and sends it to the Central Public Works Department for insertion in the budget of Public Works. The Public Works Department is, therefore, so far as military works are concerned, simply the paymaster of a branch of army expenditure which it neither orders nor controls, and thus over Rs. 10,000,000 a year of military expenditure appear in the estimates and accounts under the head of civil expenditure, though shown separately.

The telegraphs form a separate branch of administration under the **Telegraphs.** Director-General of Telegraphs. They are kept in the hands of the Imperial Government, and are subject to the general control of the Public Works Department.

Famine protective works are charged against the Famine Grant; but other expenditure on great undertakings—viz., railways and irrigation works—

Famine Protective Works.

is not charged against revenue, but is carried to capital account, and the cost of these undertakings is provided in the main by loan. These loan works must be approved by the Secretary of State, and they must be productive. For that purpose the estimates must show good reason for expecting that a railway will in five years earn interest on the money borrowed for its construction, and will recoup the interest paid during construction, and that an irrigation work will on the same principle pay its way in ten years.

The Public Works Department regulates the tariff arrangements on the State Railways. There are maximum and minimum rates within which the railway administrations can exercise a discretion, reporting their action to the Public Works Department. If an alteration of rates is proposed, involving a loss of revenue, the proposal is submitted to the Finance Department.

Financial Administration of Public Works Department.

The financial administration of the Public Works Department is regulated by the Public Works "Code," the financial provisions of which can only be altered with the assent of the Finance Department. It is conducted by the Accounts branch of the Central Works Department. The Accounts branch of the Public Works Department in each Province is also subject to the Public Works Accountant-General at Calcutta. The Examiner is the chief financial officer of the Public Works Department in the Province. His duties are in the main those of an auditor, but he is in addition an advising officer of the Provincial Government. There is also an examiner attached to each important railway.

The Examiner in each Province makes up a yearly statement of the expenditure on works in the Province, and the Accountant-General of the Public Works Department at Calcutta prepares from these Provincial statements a general statement of the expenditure upon Public Works in the Indian Empire during the expired year, which is inserted in the Finance and Revenue Accounts. The Accountant-General also publishes annually a memorandum on the accounts of the Public Works Department, in which he reviews the progress of expenditure and mentions special irregularities.

In October the Provincial Governments send up to the Public Works Department at Calcutta schemes of the works which they recommend for

Public Works Estimates.

execution in the ensuing financial year. The schemes, including both Imperial and Provincial works, are considered at headquarters in concert, so far as is necessary, with the Finance Department, and, as approved or modified, are returned to the Provincial Governments. The financial exigencies of the State necessitate occasionally reductions in this branch of the public expenditure. The executive officers of the Provincial Public Works Departments, on receiving back the schemes, prepare their several estimates on the basis as approved, and forward them to the Public Works Examiner at the Provincial headquarters, who consolidates and submits them to the Provincial Government, and the Provincial Government forwards them to the Public Works Account-

ant-General at Calcutta by the middle of January. The Accountant-General then prepares his general budget of works, both Imperial and Provincial, for the year, and submits it to the Member of Council in charge of the Public Works Department, who sends it to the Finance Department about the middle of February. It is finally sanctioned as part of the general budget by the Governor-General in Council. As soon as the budget is sanctioned, the Provincial Governments are informed of the sums which they may spend on each work, and a credit is opened at the convenient district treasury for each executive officer in charge of a work, placing at his disposal the monthly amounts which he is authorised to spend.

THE AUDIT OF PUBLIC ACCOUNTS.

The chief auditor of the Indian Empire is the Comptroller and Auditor-General, a high officer of the Central Finance Department at Calcutta. The

Audit by the Civil Accountants-General in the Provinces.

actual audit of expenditure, however, takes place, not in Calcutta, but in the Provinces where the expenditure is incurred. India, it will be recollected, is divided into eight Provincial Govern-

ments. In each government the chief auditing officer is the Accountant-General. He is a subordinate of the Comptroller and Auditor-General, and he represents the Central Finance Department in the Province. As chief auditor, he has under him examiners and their subordinates, who are stationed at the headquarters of the Province. The officers in charge of the district treasury chests send at the close of each month to the headquarters of the Province an account with vouchers of their receipts and issues during the month. It has been explained that the whole of the Indian expenditure, whether it be that of the Central Government or that of the Provincial Governments, is paid through the district treasuries. Thus the whole of the public expenditure in the Province comes before the auditing officer at the headquarters of the Province. So far as these issues are for military purposes or for public works, including telegraphs, they are, in the main, imprests, and the Accountant-General of the Province, with whom we are now dealing, has only to see that issues are made to duly accredited officers of the Military and the Works Department, or on their orders, and are within the credits assigned to those officers. The detailed audit of this expenditure is applied by the auditing officers of the Military and Works Departments respectively. The same remark applies to issues to the Post-office and Forest Departments, but the Accountant-General audits in detail all the issues for civil administration, whether Central or Provincial. Immediately after the close of the month, officers charged with civil expenditure send their accounts for the month with vouchers to the headquarters of the Province.* The Accountant-General then begins his audit. His officers are guided and bound in their work by a minute and exhaustive code of regulations, and they disallow items which are insufficiently vouched, which are not covered by proper authority, or are otherwise not in accordance with Act or Regula-

* This refers to payments made directly by disbursing officers. The vouchers for payments by the district treasury on bills are sent directly by the district treasury to the Civil Accountant-General.

tion. The disbursing officer has, of course, opportunity for explanation, and the Accountant-General accepts or rejects the explanation. If the Accountant-General rejects the explanation, he orders recovery of the money wrongly disbursed, and the treasury officer is bound to enforce the recovery. If, however, the person from whom the recovery is to be made appeals to the Local Government, and that Government supports him, recovery may be suspended pending a reference to the Government of India. All objections which are raised by the auditing officers are entered in a book, and the Accountant-General is specially enjoined to give attention to this book, which he formally reviews once a quarter. Any objection as to which the Accountant-General entertains a doubt is referred for decision to the Comptroller and Auditor-General. Cases in which the explanations offered satisfy the Accountant-General are not reported to the Comptroller and Auditor-General, but the book of objections is open to the inspection of the officers whom the Comptroller and Auditor-General sends to perform the test audit described in the paragraph on page 541 relating to the test audit.

Each account is audited by the middle of the month succeeding that to which the expenditure belongs, and the audited accounts are then submitted to the Comptroller and Auditor-General at Calcutta by the Accountant-General, who, if he thinks fit, attaches to it his own comments.

The audit is now practically completed, for doubtful questions have been decided, and doubtful charges have been finally allowed or disallowed by the auditing officers of the Province, with the exception of appeals by disbursing officers to the Provincial Government or to headquarters at Calcutta, and of special cases reserved for the decision of the Comptroller and Auditor-General.

The audited accounts reach Calcutta towards the close of the month following that to which the expenditure relates. About the same time the Comptroller and Auditor-General receives from the Accountant-General of the Public Works Department, from the Forest Department, from the Post Office, and from the several Controllers in the Military Commands the audited accounts of the expenditure, which they severally audit. He consolidates these various accounts into one general account for all India, which he lays before the Financial Member of Council in six weeks or two months after the expiry of the month to which the expenditure belongs. Thus the Financial Member of Council receives within two months from the expiry of each month an audited account of the expenditure of all India for the financial year up to that date.

The Accountants-General make annual reports showing all outstanding objections, and explaining why they have not been removed, and the Comptroller and Auditor-General reviews those reports and submits them to the Finance Minister.

The Comptroller and Auditor-General within twelve months after the close of the financial year lays before the Financial Member and before the Government of India an "appropriation" report on the year's expenditure, embodied in the form of a report, which is published in the Gazette of India.

The Examiner of Works at the Provincial headquarters is the chief auditing officer of the Public Works Department, and the executive officers of

Audit in the Public Works, Post-office, and Forest Departments.

that department send to him monthly their accounts and vouchers. The Examiner audits, under regulations laid down in the Public Works Code, the accounts as they are received,

and disallows expenditure not authorised by the code; but the executive officers can appeal to their Provincial Chiefs or to headquarters at Calcutta against the Examiners' disallowance. The Examiner is required to report to the Accountant-General of the Public Works Department at Calcutta important objections which he may raise in the course of his audit. Such objections are reported, even if the subsequent explanations of the executive officers have removed the Examiner's objection. When the monthly accounts have been passed, the Examiner draws up and sends to the Accountant-General of Works at Calcutta an audited account of the expenditure on works in his Province during the month to which the account relates, and he accompanies it with a "divisional statement of objectionable items." The Accountant-General of the Public Works Department at Calcutta compiles from these provincial accounts an audited statement of the expenditure on works in India during the month, and forwards it to the Comptroller and Auditor-General at the Audit Office in Calcutta, but he does not communicate to the Comptroller and Auditor-General the "divisional statements of objectionable items."

The Examiner in each Province goes from time to time on a tour of inspection, and applies a test audit to the books in the divisional offices. Moreover, the Accountant-General of the Public Works Department at Calcutta applies a test from time to time to the work of his examiners.

After the close of the financial year the Accountant-General of the Public Works Department prepares an appropriation account of the expenditure on public works, which is included, as far as necessary, in the general appropriation report of the Comptroller and Auditor-General.

The Public Works Department is responsible for a large amount of stores, especially for railway works. The Examiner in each Provincial Government audits the store accounts, as he audits the cash accounts, of the Public Works Department. In every September and March there is a survey of stores, and the Accountant-General of the Public Works Department at headquarters compares the result of the survey with the result of the store accounts. Control over work is exercised by a comparison of cost with estimate, and it is stated that the result is generally satisfactory.

The accounts of the Post-office and of the Forest Department are audited locally much on the same principle as those of the Public Works Department.

So far the audit, as we have described it, is local and applied by local officers, the Comptroller and Auditor-General receiving and consolidating the results. But, although the Comptroller and Auditor-General

Test Audit. deals with the accounts then submitted to him rather as an accountant than as an auditor, he exercises, nevertheless, a power, which makes him an auditor in the true sense of the term. He institutes from time to time a "test" audit. That is, he deposes certain of his own officers to

go into the Provinces and Commands, and examine in detail the accounts of a portion of the Civil expenditure, of the Public Works, the Military, and the Post Office expenditure; and he receives from those officers reports on the results of their examination. These reports, with the comments of the Comptroller and Auditor-General upon them, are laid by him before the Government of India. It is stated that the test represents about a month out of the year's expenditure.

The value of such a "test" audit cannot be overrated. In proportion as it is widely and frequently exercised, the Comptroller and Auditor-General can form a judgment as to the efficiency of the local audits, and can ascertain, within limits, whether order is observed in the conduct of financial business.

OPINIONS OF THE INDIAN EXPENDITURE COMMISSION ON THE SUBJECT OF INDIAN AUDITING.

The question of the auditing of public accounts is of such vital importance in the general scheme of dependent administration that it seems advisable to include in this Report the opinions expressed on the subject of Indian auditing by the Indian Expenditure Commission, of which Lord Welby was chairman.

The following extracts are taken from the Final Report of the Royal Commission on the Administration of the Expenditure of India, British Parliamentary Paper, Cd. 131 of 1900:—

We are anxious that our remarks should not be read as questioning the sufficiency of the system of audit in India; but we are anxious also to make clear the distinction of principle which exists between the system adopted in England and the system adopted in India. For many years the principle of an effective audit was carefully discussed at home, and the present system was introduced step by step. The last step made the audit power altogether independent of the executive power. This decision gave the force of law to the principle which English statesmen considered sound. A different principle has been adopted in India.

The system of audit in England is highly centralised, the system of audit in India is to a great extent local and decentralised. The English System. The Comptroller and Auditor-General in England is considered a judicial officer; that is to say, he holds his office during good behaviour. He is only removable on address of the two Houses of Parliament, and his salary, like that of a judge, is charged by act upon the Consolidated Fund, and is not, therefore, dependent upon an annual vote of the House of Commons. He has no executive function. He audits by his own officers and in detail the whole of the civil expenditure. He accepts the departmental audit of the War Office and Admiralty so far as examination of vouchers is concerned, but satisfies himself by his own officers stationed in the War Office and Admiralty that the expenditure is duly authorised and correctly charged to the proper head of service. He, however, tests the correctness of the departmental audit in those two great departments by examining yearly by his own

officers and in detail certain branches of expenditure which he selects for the purpose. His appropriation reports are made to the House of Commons, and a Committee of the House of Commons examines and practically passes them. He further applies a test examination to the accounts of the receipt and issue of stores, naval, military, and civil, and to the dock-yard accounts of the Navy and the manufacturing accounts of the Army. He thus ascertains that the stores and materials purchased have been duly accounted for, and that they have been expended upon the objects for which Parliament intended to provide.

The Comptroller and Auditor-General at Calcutta is the chief auditor of the Indian Empire. He is a civil servant, and holds his office subject to the same conditions as other civil servants. His office is in the Treasury building, but he has an establishment distinct from that of the Treasury. He has under him one Deputy Comptroller,

his subordinate in executive duties, and two Deputy Auditors-General who are employed solely on inspection and test audit, and some two hundred subordinate officers and clerks employed partly on executive and partly on audit work. He is charged with mixed duties, partly executive and partly audit. As an executive officer of the Finance Department, he undertakes many duties which would be discharged in England by the Secretary to the Treasury. He is responsible for the movement of funds; that is, he sees that money sufficient, but not more than sufficient, for the public service is in hand at the numerous district treasuries throughout the Empire. He is responsible for the management of the National Debt, and he is also head of the Mint and Currency Departments. He reviews the estimates of expenditure, and consolidates them into the budget which bears his signature. In the discharge of these duties he advises and acts under the directions of the Finance Minister. He may be said to represent the Treasury at Calcutta, when the Financial Secretary accompanies the Government to Simla. Thus the executive duties of the Comptroller and Auditor-General are important, and must occupy much of his official time.

Passing to his audit duties, we note that he does not personally supervise and watch the local auditors in the execution of their audit duties. He can

Audit in India. only form an opinion upon the manner in which they discharge their duties from the appeals against the decisions of the local officers which may come to his knowledge, from the result of the test audit, and from the special cases reserved for his decision. We learn that the questions so reserved, whether by his own Accountants-General or by the auditing officers of other departments, are not numerous. He accepts, under these conditions, the results of the departmental audits throughout the Indian Empire, and consolidates them into one general appropriation account, which he submits with a report to the Governor-General in Council. The audit of the Comptroller and Auditor-General in India resembles in its general features the audit applied by the Comptroller and Auditor-General at home to the expenditure of the Army and Navy; but it differs in this important respect,—that the appropriation account and his report thereon undergo no examination or review by an independent body, such as that which the appropriation accounts of the Comptroller and Auditor-General at home receive from the Public Accounts Committee of the House of Commons.

The audit of the district treasuries and of the civil expenditure is conducted in the Provinces, and by officers of the Comptroller and Auditor-General; viz., the Accountants-General of the Provinces. These

**District
Treasury Audit.**

officers are independent of the Provincial Governments whose accounts they audit. They are independent of the Departments of the Central Government, whose accounts they audit, except so far as that audit involves acts of the Central Finance Department. The accounts of military expenditure, of expenditure on public works, and of post-office expenditure, are audited by officers belonging to and dependent on those departments. These officers raise and decide questions of disallowance and irregularity, and the questions and decisions thereon are not reported to the Comptroller and Auditor-General. So far as concerns the accounts rendered to him by the local auditing officers belonging to the different departments, he is an accountant rather than an auditor. He compiles rather than audits the final accounts of expenditure prepared for the Central Government and for the Secretary of State.

It appears to us that the departmental audit in India is well organised and effective. It accompanies or follows closely the expenditure to which it

**Departmental
Audit.**

applies, and the Comptroller and Auditor-General is able within two months or so from the expiry of each month to lay before the Financial Member of Council an audited account of the expenditure of all India for the expired portion of the financial year up to that date. The promptitude with which the audit is conducted and consolidated into one account for the whole of India is, in our opinion, highly commendable. This audit is conducted by departmental officers, and departmental officers are not independent of the executive government in the sense that the officers of the Comptroller and Auditor-General at home are independent. We do not, however, lay stress upon this point, because we think that the object of the independent audit can be satisfactorily attained by the test audit applied by the Comptroller and Auditor-General. A record of objections raised by the auditor, and of the decisions given thereon, is kept in the auditing branches of the Accountant-General and of the Public Works Examiners in the Provinces, but the record arrangement in the Military Department does not appear to be so complete. We think that a uniform rule should be established throughout the service for the record of the objections and queries which have been raised by auditing officers. Records of objections taken by the local auditors are of service to the local heads of departments, and to the officers employed by the Comptroller and Auditor-General on the test audit, and they should be of service to the Comptroller and Auditor-General himself, as showing the manner in which the departmental auditors discharge their duty.

We attach a great value to the test audit. It appears to us that, if applied on a sufficient scale, it satisfies all the objects of an independent audit. We

Test Audit.

are informed that, as at present applied, it covers about one-twelfth of a year's expenditure. The Comptroller and Auditor-General is responsible for satisfying himself by means of it that the departmental audit is searching and effective, that satisfactory explanations of apparent irregularities only are accepted, and that irregularities not satis-

factorily explained are always reported. Full discretion, subject to that understanding, should be left to the Comptroller and Auditor-General as to the extent of the test which he may consider it desirable to apply.

On the question whether a change should be made in the terms of appointment and the duties of the Indian Comptroller and Auditor-General, we are

**Independence of
Comptroller and
Auditor-General.**

divided in opinion. Some of us think that the Comptroller and Auditor-General should, so far as circumstances permit, hold his office on terms similar to those which Parliament has enacted for the Comptroller and

Auditor-General of the United Kingdom; that he should be appointed by the Secretary of State in Council; that his tenure should be similar to that of the judges of the Indian High Courts, and his rank and salary equivalent to those of a Secretary of Government; that he should be relieved of all executive functions, and that those functions, with the staff now employed upon them, should be transferred to the Finance Department. His own staff would then consist of the officers now employed in the examination and record of the accounts and reports received from the auditors of the different departments in the Provinces, and of the officers whom he employs upon his test audit. It appears that the Secretary of State and the Government of India have objected to the establishment of an independent Comptroller and Auditor-General, chiefly on the ground that increase of expenditure would be the consequence. Those of us who advocate the change described above think that this increase of expenditure has been overestimated. It might be necessary to appoint an assistant secretary in the Finance Department to take over the executive duties now intrusted to the Comptroller and Auditor-General, but the staff which now discharges those duties under the Comptroller and Auditor-General should suffice to discharge them in the Finance Department. An increase is certainly contemplated in the pay of the Comptroller and Auditor-General sufficient to mark the importance of his independent office, but the staff which now discharges under him his audit duties should suffice for those duties in future, as no change is suggested in the departmental audit as at present established. If the Comptroller and Auditor-General should, in the exercise of his discretion, think it necessary to extend his test audit, he would require a larger staff. That, however, is a question for his discretion. Indian authorities appear to be satisfied with the extent of the present test, and, if experience supports that view, there would be no need for an increase in the number of officers.

Others of us do not concur in the views and recommendations stated above. They hold that, in the absence of anything in the evidence which supports these recommendations, the Commission is not justified in making a proposal which would impose a considerable new charge on the Indian tax-payer. They observe that all the evidence recorded on the subject is unfavourable to the proposal. Lord Cromer said that, if there was any doubt on the matter, the Comptroller and Auditor-General might be made independent, but he added, "I should hardly think it is worth while incurring any expenditure for the purpose." Sir David Barbour expressed a similar opinion. He thought that the proposal would involve considerable expense, and he hardly thought that the advantage was worth the cost. Sir Auckland Colvin held

that the independence of the Comptroller and Auditor-General and the auditing officers was practically sufficient. There is no evidence of the opposite purport. It is further observed that there is no evidence before the Commission of the prevalence of irregularities in the Indian audit. On the contrary, the system is said in the report to be "well organised and effective," and the detection of irregularities appears to be more immediate and direct in India than in England.

It is asked therefore, On what do these recommendations rest? The answer is that they rest solely on the fact that the system which it is proposed to introduce in India has answered well in England. But this is to assume that what is suitable in England must necessarily be suitable in India. Now it is obvious that the circumstances of the two countries are widely different. In England the Parliament which votes supplies naturally asserts the right to exercise through the Comptroller and Auditor-General a check on the expenditure by the Executive Government of the supplies voted. In India the Supreme Government allots money to the Spending Departments, and already possesses in its Comptroller and Auditor-General and his staff an auditing agency independent of all the subordinate spending authorities. The whole subject has been carefully considered on two occasions in the last twenty years, and on both occasions the Secretary of State decided that recommendations similar to those now again put forward should not be adopted. The Government of India in 1881 was prepared to try the experiment at an extra annual cost of Rs. 153,000. But Lord Hartington did not consider that, in the circumstances of India, an independent officer of very high standing was necessary in addition to the existing establishment, and decided that the Comptroller-General should retain his executive duties along with those of Auditor-General. Lord Cross in 1889, after further inquiry, confirmed this decision.

The members of the Commission who hold these views observe further that the administrative difficulties involved in the proposals have not been considered, and would probably be serious. As the report says, "The system of audit in England is highly centralised, the system of audit in India is to a great extent local and decentralised." The adoption of the recommendations would cause a great dislocation of a system which is admitted in the report to be "well organised and effective." And, above all, it is most undesirable to adopt a measure which might suggest to the people of India that the Government of India requires to be checked in the auditing of its expenditure by an independent authority set up in India. On these grounds they are unable to support recommendations which would certainly increase expenditure, while they would, in their opinion, secure no compensating advantage.

We are, therefore, unable to make any recommendation on this subject.

We think it would be well if the appropriation accounts of Indian expenditure and the reports of the Comptroller and Auditor-General thereon followed the form of the appropriation accounts which the Comptroller and Auditor-General of the United Kingdom presents with his certificate and comments to the House of Commons. It is a form approved by the House of Commons, and found convenient by the Committee of Public Accounts in their examination of

Appropriation Report.

expenditure under the various votes. We may notice that this form of account and report has been adopted by the auditor of the Indian Home Accounts. The change would, therefore, only mean the assimilation of the form used for expenditure in India to the form used for the expenditure of the Indian Government at home. It would certainly be desirable that this officer's appropriation report should embody the result of his test audit.

It is essential to an effective system of audit that the audited accounts of public expenditure, together with the reports of the Auditor thereon, should

**Examination at Home
of the Audited Accounts
of the Indian Government.**

be examined and finally passed by an authority whose judgment has weight with the public. The accounts of the public expenditure of the United Kingdom are

reviewed and practically passed by the Committee of Public Accounts of the House of Commons. The House of Commons, which grants the money required for the public service, satisfies itself by this means that its votes have been duly appropriated to the objects for which the grants were made. The reports of the Committee presented to the House of Commons make public the judgment which the Committee pass upon the accounts, and a minute of the Treasury published later shows how, and to what extent, the executive government has given effect to the recommendations of the Committee. Thus the system of account is complete from the first issue of an imprest from a grant of Parliament to the final discharge of the accountant on the recommendation of a Committee of the House of Parliament which made the grant. The system has been in operation for more than thirty years, and has worked to the satisfaction of the Treasury; that is to say, of the department which is responsible to Parliament for financial order, and also of Parliament. There can be no doubt that the knowledge that irregularities will be brought to notice, and will form the subject of comment by a Committee of the House of Commons, has a good effect throughout the public service. These final safeguards are wanting in the Indian system, and we think that they should now be constituted. The House of Commons, which grants money to the Crown for the public service, has a right to satisfy itself that its grants are properly expended. The House of Commons does not grant money for the service of India, and this distinction must be borne in mind. The Secretary of State in Council is the final authority on Indian expenditure, and he ought to be satisfied that expenditure in India has been duly and orderly governed. We think, therefore, that the appropriation accounts, with the report of the Comptroller and Auditor-General thereon, should be forwarded by the Government of India to the Secretary of State in Council, and by him referred to a Standing Committee for examination. We think, further, that two members of this Committee should be unconnected with the India Office, and that one of them should be the English Comptroller and Auditor-General. The report of the Committee, together with the appropriation accounts, the report of the Indian Comptroller and Auditor-General, and the despatch of the Indian Government which covers them, should be laid before Parliament, and should be accompanied by a minute of the Secretary of State in Council, dealing with questions which may be raised in the report of the Home Committee.

The Auditor of the Indian Home Accounts addresses a report to the Secretary of State, modelled on the lines of the appropriation reports which the

Audit of Home Accounts.

Comptroller and Auditor-General in England addresses to the House of Commons. His report is laid before Parliament, but the House of Commons does not review it as the reports of the English Comptroller and Auditor-General are reviewed, and the action of the Secretary of State in Council upon the report is not communicated to Parliament. The Auditor of the Home Accounts, like the English Comptroller and Auditor-General, has no power finally to disallow expenditure, but the Government of India Act (1858), Section 52, directs him to express his approval or disapproval of the accounts of the Secretary of State. He is to make such remarks and observations in relation thereto as he may think fit, specially noting any case in which it shall appear to him that Indian revenue has been appropriated to other purposes than those of the Government of India. He is also to specify any defects or irregularities in the authorities having relation to the Secretary of State's expenditure.

We understand the auditor to hold that it is open to him to form his own judgment as to whether a service is properly chargeable to the Government of India, and whether, therefore, the payments on account of it should be the subject of comment. He may, for instance, consider, in the case of a payment to the Admiralty for the services of ships in Indian waters, whether the services of those ships are properly Indian services, and, further, whether the payment attached to those services is at an unreasonable rate, and it is in his own discretion whether he should make a comment upon it. The auditor informs us that the authority of the Secretary of State in Council is usually accepted, but occasionally items have been reported when the provisions of the Act did not appear to have been complied with.

The provisions of the Act intrust a large discretion to the auditor, and we cannot doubt that Parliament intended him to exercise a discretion which they were so minute in describing. The auditor appears to us to apply his audit in accordance with the intention of the Act, and in a spirit similar to that in which the Comptroller and Auditor-General in England applies his audit to Imperial expenditure.

We are of opinion that he is only obeying the orders of Parliament when in the free exercise of his judgment he questions an item of expenditure, and when he offers such comment as he thinks fit upon the account submitted for his audit, especially if it appears to him that Indian revenues have been appropriated to other purposes than those of the Government of India, and when he specifies any defect or irregularity in the authority under which expenditure has been incurred. The Secretary of State in Council is free to accept or reject such criticisms, for his authority is ultimately supreme, and he himself allows or disallows objections advanced by the auditor against his financial acts.

The questions which remain to be dealt with in this chapter are those of coinage and paper-currency, in regard to each of which there has recently been passed consolidating and amending legislation.

THE INDIAN COINAGE ACT, 1906.

This Act extends to the whole of British India, and consolidates and amends all previous coinage legislation. Under the terms of the Act the Governor-General in Council has the authority to establish a Mint at any place at which a Mint does not for the time being exist, and to abolish any Mint whether in existence when the Act was passed or established thereafter. The following are the sections of the Act relating to Coinage and Legal Tender:—

SILVER COINAGE.

4. The following silver coins only shall be coined at the Mint for issue under the authority of the Governor-General in Council, namely:—

(a) a rupee to be called the Government rupee; (b) a half rupee, or eight-anna piece; (c) a quarter-rupee, or four-anna piece; and (d) an eighth of a rupee, or two-anna piece.

5. (1) The standard weight of the Government rupee shall be one hundred and eighty grains Troy, and its standard fineness shall be as follows, namely, eleven-twelfths, or one hundred and sixty-five grains of fine silver, and one-twelfth, or fifteen grains of alloy. (2) The other silver coins shall be of proportionate weight and of the same fineness:

Provided that, in the making of silver coins, a remedy shall be allowed of an amount not exceeding the following, namely:—

	Remedy in Weight.	Remedy in Fineness.
Rupee }	Five-thousandths.	Two-thousandths.
Half-rupee }	Seven-thousandths.	} Three-thousandths.
Quarter-rupee }	Ten-thousandths.	
Eighth of a rupee }		

NICKEL COINAGE.

6. The following nickel coin only shall be coined at the Mint for issue under the authority of the Governor-General in Council, namely: a one-anna piece.

7. The standard weight of the one-anna piece shall be sixty grains Troy: Provided that, in the making of nickel coin, a remedy shall be allowed of an amount not exceeding one-fortieth in weight.

BRONZE COINAGE.

8. The following bronze coins only shall be coined at the Mint for issue under the authority of the Governor-General in Council, namely:—

(a) a pice, or quarter-anna; (b) a half-pice, or one-eighth of an anna; and (c) a pice, being one-third of a pice, or one-twelfth of an anna.

9. (1) The standard weight of the pice shall be seventy-five grains Troy, and the other bronze coins shall be of proportionate weight. (2) Bronze coin shall be coined from a mixed metal consisting of copper, tin and zinc:

Provided that, in the making of bronze coins, a remedy shall be allowed of an amount not exceeding one-fortieth in weight.

DIMENSIONS AND DESIGNS OF COINS.

10. (1) The Governor-General in Council may, by notification in the *Gazette of India*, (a) direct the coining and issuing of all coins referred to in sections 4, 6 and 8, and (b) determine the dimensions of, and designs for, such coins.

(2) Until the Governor-General in Council otherwise determines by notification under sub-section (1), the dimensions and designs of the silver coins coined under this Act shall be those prescribed for the like silver coins under the Indian Coinage Act, 1870, at the time of the commencement of this Act.

LEGAL TENDER.

11. Gold coins, whether coined at His Majesty's Royal Mint in England or at any Mint established in pursuance of a Proclamation of His Majesty as a branch of His Majesty's Royal Mint, shall be a legal tender in payment or on account at the rate of fifteen rupees for one sovereign:

Provided that such coins have not been called in by any Proclamation made in pursuance of the Coinage Act, 1870, or have not lost weight so as to be of less weight than that for the time being prescribed for like coins by or under the said Statute as the least current weight.

12. (1) The rupee and half-rupee shall be a legal tender in payment or on account: Provided that the coin—(a) has not lost in weight so as to be more than two per cent. below standard weight, and (b) has not been defaced.

(2) The quarter-rupee and eighth of a rupee shall be a legal tender in payment or on account for any sum not exceeding one rupee: Provided that the coin—(a) has not lost in weight so as to be more than such percentage below standard weight as may be prescribed as the limit of reasonable wear, and (b) has not been defaced.

13. The nickel coin specified in section 6 shall be a legal tender in payment or on account for any sum not exceeding one rupee at the rate of sixteen for a rupee.

14. The bronze coins specified in section 8 shall be a legal tender in payment or on account for any sum not exceeding one rupee at the following rates, respectively, namely:—
 (a) the pice at the rate of sixty-four for a rupee, or four for an anna; (b) the half-pice at the rate of one hundred and twenty-eight for a rupee, or eight for an anna; and (c) the pice at the rate of one hundred and ninety-two for a rupee, or twelve for an anna.

THE INDIAN PAPER CURRENCY ACT, 1905.

The only paper currency which is a legal tender in Burma are the currency notes issued by the Government of India under the terms of the Indian Paper Currency Act, 1905. This Act consolidates and amends all previous legislation on the subject of Indian Paper Currency.

Under the Act there is a Department of the public service called the Department of Paper Currency, whose function is the issue of promissory notes of the Government of India, called currency notes, payable to bearer on demand, and of such denominational value as the Governor-General in Council may direct. At the head of the Department is a Head Commissioner of Paper Currency, and subordinate to him are Commissioners of Paper Currency at Madras, Bombay, and Rangoon.

The Governor-General in Council has power to establish districts, to be called circles of issue, four of which circles must include the towns of Calcutta, Madras, Bombay, and Rangoon, to establish in each such town an office or offices of issue, to establish in any town situate in any circle an office, to be called a currency agency.

The Head Commissioner of Paper Currency is the officer in charge of the circle of issue which includes Calcutta, and the Commissioners of Paper Currency for Madras, Bombay, and Rangoon are the officers in charge of the circles of issue which include those towns, respectively. For each other circle of issue there is an officer in charge, to be called the Deputy Commissioner of Paper Currency, and for each currency agency an officer to be called the Currency Agent. All officers under the Act are appointed by the Governor-General in Council.

Notes are issued freely to any person on demand, in exchange for the amount thereof in rupees, half-rupees, or in gold coin; and notes are issued, on the requisition of the Comptroller-General, to any Government Treasury in exchange for gold coin which is not legal tender, or for gold bullion, at the rate of one rupee for 7.53344 grains Troy of fine gold.

A currency note of the denominational value of five rupees, issued from any town not situate in Burma, is legal tender in any place in British India except Burma; a currency note of the denominational value of five rupees, issued from any town in Burma, is legal tender at any place in Burma; and a currency note of any denominational value exceeding five rupees is legal tender at any place within the circle from which it was issued.

The whole amount of currency notes at any time in circula-

tion may not exceed the total amount represented by the sovereigns, half-sovereigns, rupees, half-rupees, and gold bullion, and the sum expended in the purchase of the silver bullion and securities, which are for the time being held by the Secretary of State for India in Council and by the Governor-General in Council as a reserve to provide for the satisfaction and discharge of the currency notes; and the notes are deemed to have been issued on the credit of the Government of India as well as on the security of the reserve.

The following table shows the amount of paper currency in circulation in Burma during the years 1895-1904:—

MONTHLY AVERAGE VALUE OF CURRENCY NOTES IN CIRCULATION
IN THE RANGOON-BURMA PAPER CURRENCY CIRCLE, AND
OF THE SILVER COIN RESERVE, 1895-1904.

(IN RUPEES.)

Year ending 31 March.	Average Value* of Notes in Circulation.	Silver Coin* Reserve.	Year ending 31 March.	Average Value* of Notes in Circulation.	Silver Coin* Reserve.
1895 . . .	4,865,790	20,699,470	1900	8,494,113	26,132,897
1896 . . .	6,498,710	21,702,500	1901	9,531,051	10,063,851
1897 . . .	5,494,420	24,555,534	1902	9,616,673	25,028,936
1898 . . .	7,563,698	19,148,684	1903	11,114,539	20,417,619
1899 . . .	7,360,134	20,080,909	1904	15,765,439	21,018,718

*The figures are the average for the year of the circulation on the last day of each month.

The following table shows the value of currency notes in circulation in Burma during 1905 and 1906:—

NOTE CIRCULATION OF THE RANGOON-BURMA PAPER CURRENCY
CIRCLE ON JUNE 22, 1905, AND ON JUNE 22, 1906.

Notes for	1905. Number of Notes.	1906. Number of Notes.	Notes for	1905. Number of Notes.	1906. Number of Notes.
Ra. 5 . . .	10,826	11,599	Ra. 1,000	985	993
Ra. 10 . . .	224,711	262,512	Ra. 10,000	564	669
Ra. 20 . . .	14,630	15,848			
Ra. 50 . . .	5,527	5,695			
Ra. 100 . . .	83,376	92,155	Total number of notes . . .	340,817	389,650
Ra. 500 . . .	198	188	Total value of notes, Ra. . .	17,931,790	20,187,425

CHAPTER XII.

FINANCIAL ADMINISTRATION

REFERENCES.

- Strachey, Sir John, and Strachey, Lieutenant-General Richard. *The Finances and Public Works of India from 1869 to 1881*. London, Kegan Paul, 1882, pp. xx + 468.
- Strachey, Sir John. *India: Its Administration and Progress*. Third edition. London, Macmillan, 1903, pp. xxii + 515.
- Chesney, General Sir George. *Indian Polity: A View of the System of Administration in India*. Third edition. London, Longmans, 1894, pp. xx + 409.
- Jenks, Jeremiah W. *Report on Certain Economic Questions in the English and Dutch Colonies in the Orient*. Washington, Govt. Press, 1902, pp. x + 176.
- Indian Expenditure Commission. *Final Report of the Royal Commission on the Administration of the Expenditure of India*. British Parliamentary Paper, Cd. 131 of 1900. Folio, pp. vi + 190.
- Report on the Working of the Income Tax Act in Burma*. Rangoon, Govt. Press. Annual.
- Report on the Administration of the Excise Department in Burma*. Rangoon, Govt. Press. Annual.
- Report on the Revenue Administration of Burma*. Rangoon, Govt. Press. Annual.
- Report on the Administration of the Stamp Revenue in Burma*. Rangoon, Govt. Press. Annual.
- Report on the Administration of the Salt Revenue in Burma*. Rangoon, Govt. Press. Annual.
- Report on the Local Funds of Burma*. Rangoon, Govt. Press. Annual.
- Note on the Administration of the Provincial Finances of Burma for the Five Years of the Provincial Settlement commencing from 1897-98*. Rangoon, Govt. Press, 1901, folio, pp. 24.

Financial administration in Burma rests on an agreement between the Provincial Government and the Government of India, generally known as the Provincial Contract or Provincial Settlement. The development of the system of Provincial Contracts as a solution of the enormous difficulties involved in administering the finances of a country of such vast extent and such varied conditions as the British Empire in India, presents many points of interest to the student; and, as a knowledge of the financial relations between the Central Government and the Provincial Government is essential to an understanding of the financial administration of Burma, the following account of

to give them out of the general revenues of the Empire; they found by experience that the less economy they practised, and the more importunate their demands, the more likely they were to persuade the Government of India of the urgency of their requirements. In representing and pressing those requirements, they felt that they did what was right, and they left to the Government of India, which had taken the task upon itself, the responsibility of refusing to provide the necessary means.

It was at that time impossible for either the Supreme or Local Governments to say what portion of the Provincial revenues was properly applicable to local wants; for the revenues of the whole of India went into a common fund, and to determine how much of this fund ought fairly to be given to one Province, or for one object, and how much to others, was impracticable. "The distribution of the public revenue," wrote General Strachey, "degenerates into something like a scramble, in which the most violent has the advantage, with very little attention to reason; as local economy leads to no local advantage, the stimulus to avoid waste is reduced to a minimum; so, as no local growth of the income leads to an increase of the local means of improvement, the interest in developing the public revenues is also brought down to the lowest level."

The unsatisfactory condition of the financial relations between the Supreme and the Local Governments led to other evils. Constant differences of opinion about petty details of expenditure, and constant interference of the Government of India in matters of trivial importance, brought with them, as a necessary consequence, frequent conflicts with the Local Governments regarding questions of Provincial administration, of which they were the best judges, and of which the Government of India could know little. The relations between the Supreme and Local Governments were thoroughly inharmonious, and every attempt to make financial control more stringent increased an antagonism the mischief of which was felt throughout the public service.

It was not until 1867 that the subject of decentralisation began to assume a clear shape. Definite proposals were then for the

Reform suggested
in 1867.

first time made for the adoption of specific practical measures which should accomplish the object in view. The author of these proposals was General Strachey, and the principles laid down by him in papers written in 1867 are those which have since received so wide an application. To Lord Mayo (Governor-General of India from 1869 to 1872) belongs the honour of

having actually applied the only effectual remedy for the evils which have been described. He resolved to carry out, so far as circumstances would allow, the reforms which General Strachey had proposed; to give to the Local Governments the economical standard which they required; to make over to them a certain income within which they must regulate their local expenditure; and to leave to them, subject to certain general rules and conditions, the responsibility of managing their own local affairs.

From the commencement of the official year 1871-72, the financial control of the following services was transferred to the

Reforms effected by Lord Mayo.	Local Governments: jails, police, education, registration, medical services, printing, roads, and civil buildings. The objects in view were stated by Lord Mayo himself in the Legislative Council on March 18, 1871, in a speech from which the following paragraphs are extracted:—
--------------------------------	---

Under these eight heads it is proposed to intrust the administration, under a few general conditions, to the Provincial Governments, and a fixed contribution will be made from imperial revenue every year. . . . It is impossible to prophesy or say at present what can be done in the far future; but I should be misleading the Local Governments if I were not to say that it is our opinion that these sums are now fixed at an amount which cannot be exceeded for at least a number of years. I think it is desirable that this should be perfectly understood, because one of our objects is the attainment of as great an amount of financial certainty as possible. . . . But, in addition to the increased power of administration which it is proposed to give to the Local Governments, an administrative change will take place, which I think they will be able to exercise with advantage. They will have a large sum to devote to local objects; the power of allotment will be left absolutely to them; and they will be able to vary their grants for roads, civil buildings, education, and other heads, from year to year, as they may think most desirable; in some provinces it may be desirable in one year to spend a larger sum on roads; in others it may be desirable to fill up some shortcomings with regard to education or other objects. The Local Governments will thus be able to exercise that power of allotment with much greater satisfaction to themselves and to the public than they did under the old system, when they were obliged to consult the Supreme Government, not only as to the allotments that were made in the beginning of the year, but also with regard to any appropriations that were thought desirable within the year, provided that these allotments exceeded a certain amount. . . . I have heard it stated that, by the proposals which we make, there may arise a separation of interests between the Supreme and the Local Governments; I fail to perceive any strength whatever in this assertion; I believe that, so far from there being a separation of interests, the increased feeling of responsibility and the feeling of confidence which is reposed in them will unite and bind together the

Supreme and Local Governments to a greater extent than before. . . . I believe that we shall see, in place of greater uncertainty, greater certainty; we shall see works and objects carried on with more vigour, enthusiasm, and with less hesitation, when these works and these objects are effected under the immediate responsibility of those who are most interested in them.

In 1877 and in subsequent years the policy outlined above was modified and developed. A fixed grant of money is now

The Present System of Provincial Contracts.

no longer made, but the whole or a proportion of certain taxes and other receipts collected by the Provincial Governments is assigned to them in order to meet either the whole or a proportion of the charges incurred for the various branches of internal administration within the Provinces. The Provincial Governments are thus given a direct interest in the efficient collection of the revenue, and the collection has in consequence improved. The Provincial Governments may not alter taxation, or the rules under which the revenues are administered, without the assent of the Central Government. They are subject to the general supervision of the Central Government, and to conditions concerning the maintenance of great lines of communication, the creation of new appointments, the alteration of scales of salaries, and some other matters. In other respects they have a free hand in administering their share of the revenue.

In each Province a branch of the secretariat is specially charged with financial administration, under the immediate control of a Member of the Council in the Presidencies, in the other Provinces of the Lieutenant-Governor or Chief Commissioner. Correspondence is conducted with the Central Finance Department through this Department. The Civil Accountant-General, who represents in the Province the Finance Department of the Central Government, is considered a financial adviser of the Provincial Government, but in this capacity he has no power beyond that of tendering advice.

The arrangements between the Central and Provincial Governments, commonly called Provincial contracts, are concluded for periods of five years. Towards the close of each quinquennial period the Provincial finances are reviewed. An estimate of the expenditure thought necessary for each Province is made, and a proportion of the Provincial revenue sufficient for that expenditure is assigned to the Province. Thus, under the revised arrangement of 1897, the Provincial Governments, speaking generally, retain the whole of the Provincial rates, three-fourths

of the revenue from stamps, half the revenue from assessed taxes from the forests and from registration, one-fourth of the land revenue, one-fourth of the excise (one-half in Burma and Bengal), and a large part of the departmental receipts, with the exception of railway and irrigation for the most part, and military receipts. The Provincial Government takes for five years its proportion of revenue resulting from this division, the Imperial Government taking the balance. Thus both Governments benefit proportionately by any increase of revenue accruing during the period. The Provincial Government retains any balance which it may have accumulated by careful administration during the expiring period.

In the case of extraordinary expenditure causing a deficit in the budget of the Central Government, the Central Government may call, and has called, upon the Provincial Governments to surrender a portion of the balances of revenue in their hands. It did so during the Afghan War, but it subsequently made good to the Provinces the sums reclaimed (Rs. 670,000). It did so in 1886-88 in order to meet the charge of the Burma War, and the fall in the gold price of silver (Rs. 400,000); again in 1890-91 (Rs. 490,000); and again in 1894-95 (Rs. 405,000); but in the last two instance the amounts were subsequently refunded.

But, apart from such pressure, the Central Government undertakes the extraordinary risks of Government. Sir E. Baring (Lord Cromer), in the financial statement of 1883, pointed out that Indian finance is exposed to four special dangers,—war, fall in opium, fall in exchange, and famine. The Provincial contract system throws the burden of the three first risks on the Central Government. Only the fourth falls on the Provincial Governments. In the case of famine the Provincial Governments may not call upon the Central Government for assistance until they have exhausted their current income and a certain proportion of their accumulated balances.

Further, such of the Provincial Governments as have legislative councils (viz., Madras, Bombay, Bengal, the North-west Provinces, the Punjab, and Burma) may, with the consent of the Government of India, impose Provincial or local rates and cesses, and may apply the produce to Provincial or local purposes.

In development of the policy of decentralisation the Central Government has desired the Provincial Governments to delegate to subordinate authorities items of revenue and expenditure which those authorities can administer with success.

It must be borne in mind that this division between central

and Provincial expenditure does not mean that services administered by the Central Government and by the Provincial Governments, respectively, are distinct services in the sense that the services administered by local authorities in England are distinct from services administered by the Imperial Government. The income and expenditure of the Provincial Governments are incorporated into and form part of the income and expenditure of the Indian Empire, and appear as such in the annual accounts of the Central Government. The Central Government, as a matter of convenience, keeps in its own hands the collection of certain revenues, such as those of the Salt Department in Northern India, the Post Office, the Telegraph Department, and those of the districts of Coorg and Ajmere, besides certain receipts connected with the Army and other services, while it leaves to the Provincial Governments the collection of the rest of the revenue; but the sums collected, whether by the Central Government or by the Provincial Governments, are brought alike under their different heads into the general budget or central account of the State. Again, the Central Government keeps in its own hands the expenditure on the army and on the Indian marine, on certain military roads, on railways and telegraphs, on most of the charges for the post office, and on the mint, and the main part of the expenditure on foreign affairs. A share of the cost of collecting certain heads of revenue is charged in the same proportion as the revenue to the Imperial and Provincial Governments. When the revenue is Imperial, the cost of collecting it is generally Imperial, even when the revenue is collected by the Provincial Governments on behalf of the Imperial Government. Lastly, the Imperial Government delegates to the Provincial Governments the bulk of the expenditure on civil administration, law and justice, registration, medical service, jails, police, education, ordinary roads, civil buildings and works, printing and stationery, and pensions, and some works, such as canals and other irrigation works; but this Provincial expenditure, like the expenditure incurred by the Central Government, is brought into one general account of the expenditure of the State, and it is audited by officers of the Central Government stationed in the various Provinces where the expenditure is incurred.

The shares of revenue and expenditure as apportioned each year between Imperial and Provincial, in each Presidency, Province, and Chief Commissionership, are shown in detail under each head in the annual volume *Finance and Revenue Accounts* of the Government of India; and a summary for eight years is

given each year in the volume *Statistics compiled from the Finance and Revenue Accounts of the Government of India*. These volumes are published annually in Calcutta by the Government of India. The rigour of the Provincial contract is to some extent relaxed by means of adjustments of the respective shares of Land Revenue. These adjustments are known as Contributions, and they introduce a certain degree of flexibility into the financial relations between the Central and the Local Governments. For instance, in 1903-04 the Government of India made contributions from the Imperial share of Burma Land Revenue of Rs. 300,000 for a hospital and museum and Rs. 400,000 in aid of primary education in addition to certain specific contributions provided for in the Provincial Settlement.

THE BURMA PROVINCIAL CONTRACT.

The last completed contract affecting the finances of Burma came into operation on April 1, 1897, and ran for the five official years 1897-98 to 1901-02. It was the

The Provincial Contract for the Five-year Period 1897-98 to 1901-02.

first Burma Provincial Contract which embraced the finances of Upper Burma, as well as those of Lower Burma,

and it was, therefore, the first Provincial Contract for the whole Province. In so far as the revenue and expenditure of Burma are divided into Imperial and Provincial shares, the proportion of the division is shown in the following table:—

REVENUE.		HEAD.	EXPENDITURE.	
Imperial.	Provincial.		Imperial.	Provincial.
1/3	2/3	Land.	—	1
1/2	1/2	Salt.	1/2	1/2
1/4	3/4	Stamps.	1/4	3/4
1/2	1/2	Excise.	1/2	1/2
1/2	1/2	Assessed Taxes.	1/2	1/2
1/2	1/2	Forests.	1/2	1/2
1/2	1/2	Registration.	1/2	1/2

In addition to the above heads there is an expenditure head "Refunds and Drawbacks." Refunds and drawbacks are made in regard to each of the revenue heads given above, and the payment of sums under each head is divided between Imperial and Provincial in the same proportion as the corresponding revenue under each head.

All other main heads of Revenue and Expenditure, with the small exceptions noted below, are either wholly Imperial or wholly Provincial. They are shown in the following table:—

HEADS OF REVENUE AND EXPENDITURE IN BURMA, UNDER THE LAST COMPLETED PROVINCIAL CONTRACT, WHICH ARE WHOLLY IMPERIAL OR WHOLLY PROVINCIAL.

REVENUE.		EXPENDITURE.	
Wholly Imperial.	Wholly Provincial.	Wholly Imperial.	Wholly Provincial.
Opium. * Customs. Tribute. Railways. Military works.	Interest. From Civil Departments. Irrigation. Civil works.	Ecclesiastical. Interest on obligations other than debt. Political. Railways. Military works.	Land Revenue. Courts of Law. Jails. Police. Marine. Education. Medical. Customs. † Miscellaneous civil charges. Interest on debt. Irrigation. Civil works. ‡ General Administration.

The Provincial Contract terminating with the official year 1901-02 was renewed for a further period of five years, with only two important changes: the Imperial share of Land Revenue was raised from one-third to one-half; and the Imperial share of Excise Revenue was raised from one-half to two-thirds.

Important changes are shortly to be made in the system of Provincial Contracts. I do not refer at length to these changes because they have not yet become operative, and because they are not to be applied to Burma for some years to come.

It is sufficient for my immediate purpose if I quote the following passage from Lord Curzon's Address to the Legislative Council of India, delivered on March 30, 1904:—

I alluded last year to the hope that we were on the eve of a noteworthy change, . . . no less than the substitution of a permanent or relatively perma-

* Under this head the Provincial revenue gets a small sum from warehouse and wharf rents. For the year 1901-02 the Imperial share of customs revenue was Rs. 9,646,400, and the Provincial share was Rs. 105,547.

† Under this head a small portion of the expenditure is classed as Imperial. For the year 1903-02 the Imperial share of this expenditure was Rs. 172,278, and the Provincial share Rs. 1,365,294.

‡ Under this head a small proportion of expenditure is classed as Imperial. For the year 1903-02 the Imperial share of this expenditure was Rs. 267,223, and the Provincial share Rs. 1,054,795.

ment settlement for the present five-years plan. The latter has existed for a quarter of a century. It was better than the system which preceded it, but it admitted of much improvement. It was not an economical plan because it encouraged extravagance in the concluding years of each term; and it was not a satisfactory plan because it led to a rather unseemly squabble with the Supreme Government at the end. The better method was clearly to give to Local Governments a permanent instead of a temporary interest in the revenue and expenditure under their control, subject to certain broad principles in fixing the provincial assignments. This we have succeeded in doing in the cases of Madras, Bengal, the United Provinces, and Assam, and have thereby laid the foundations of a financial autonomy that I hope will steadily develop, and will enable the Local Governments in the future to undertake enterprises from which they are now debarred. I mention the matter here both on account of its intrinsic importance and because I agree with the Lieutenant-Governor in thinking that it furnished a conclusive answer to those who are always accusing the Government of India of undue centralisation. I may point out that efficiency of administrative control is not centralisation, though it is often mistaken for it. Centralisation is the absorption by a central body of powers or privileges hitherto enjoyed or capable, if created, of being exercised by subordinate bodies. I acknowledge no such tendency. We have kept Local Governments up to the mark because I do not believe in lax or sluggish control or in the abdication of powers which have been provided for special objects. But if an occasion has anywhere arisen where it was possible to devolve or depute powers we have gladly taken it; and these new settlements constitute, in my view, the most important step in the nature of decentralisation that has been adopted for many years, and will, I hope, be the forerunner of others in the future.

CLASSIFICATION OF THE PUBLIC FUNDS.

The public revenue and expenditure of Burma fall into the following five divisions, of which the first three only are incor-

Five Classes of Funds. incorporated in the general accounts of the Government:—(1) Imperial revenue and expenditure, representing the Imperial share of receipts and charges as fixed under the terms of the Provincial Contract; (2) Provincial revenue and expenditure, representing the Provincial share of receipts and charges as fixed under the terms of the Provincial Contract; (3) Incorporated Local Funds, representing the revenue and expenditure of certain Funds whose accounts are incorporated with the general accounts of the Provincial Government; (4) Excluded Local Funds, representing the revenue and expenditure of certain Funds whose accounts are not incorporated in the general accounts of the Provincial Government, and (5) Municipal Funds.

Imperial revenue, as shown in the accounts of the Government of Burma, includes revenue under the following heads,

Imperial Revenue. Land Revenue, Opium, Salt, Stamps, Excise, Customs, Assessed Taxes, Forests, Registration, and Tributes from Native States, and receipts under the following heads, State Railways, Major Irrigation Works, Military Public Works, and Miscellaneous, the last being a small item made up of several minor heads and amounting in 1904-05 to only Rs. 130,762. Of the above heads of revenue and receipt some are wholly Imperial, others represent the Imperial share of revenue under the terms of the Provincial Contract. It is most important to note that the accounts of the revenue and expenditure of the Post Office and Telegraphs are not incorporated in the Provincial Accounts. These Departments are worked by the Imperial Indian Government over the whole extent of British India, and their accounts appear only in the general accounts of the Government of India. A return is, however, published annually in the *Financial and Commercial Statistics of British India*, issued annually in Calcutta by the Government of India, showing the revenue and expenditure of the Postal Department in its operations in each Presidency or Province of India. The figures relating to Burma for recent years are given in Tables IV. and V., Appendix M, of this volume. I have been unable to find any statement of the revenue and expenditure of the Telegraph Department in Burma. In the *Administration Report of the Indian Telegraph Department* the statistics are not divided under Presidencies and Provinces; and no reference to Telegraphs appears in the *Report on the Administration of Burma*.

Imperial Expenditure, as shown in the accounts of the Government of Burma, includes the Imperial share, under the Provincial Contract, of the direct demands

Imperial Expenditure. on the revenue, which are made up of the charges in respect of the collection of the revenue, and of the refunds and drawbacks under each shared revenue head; the whole of the charges of the Political and Ecclesiastical Departments; a small item under General Administration and under Scientific and other Minor Departments (amounting in 1904-05 to Rs. 298,445); expenditure on Railway Revenue Account, on Major Irrigation Works, on Military Works; and a small item under Miscellaneous Civil Charges (amounting in 1904-05 to Rs. 35,608). In order that confusion may be avoided when the public revenue and expenditure of Burma are dealt with in detail it is necessary to bear the following facts in mind:

first, that all expenditure, unless an express statement is made to the contrary, is expenditure charged to revenue, and does not include capital outlay on railways, irrigation, etc., a class of expenditure which appears under the Imperial, but not under the Provincial or Local divisions of the accounts; and, second, that the expenditure shown under the head Imperial in the Burma accounts includes only such sums as are expended in Burma under the heads used in the Burma accounts, and excludes all other payments made by the Central Government of India on account of Burma, such as military charges, debt charges, pension charges, and other outlay which the Government of India defrays out of its share of the Burma revenue reserved to it under the Provincial Contract.

Provincial Revenue and Expenditure fall almost entirely under the following heads: Refunds and Drawbacks, Charges in respect of the Collection of Revenue, Salaries and Expenses of Civil Departments, Minor Irrigation Works and Navigation, Civil Public Works, and Miscellaneous Civil Charges, of which the largest is Stationery and Printing. Under the Provincial division of the accounts the whole revenue and expenditure are included,—that is to say, all moneys received or disbursed by the Provincial Government; but where revenue or expenditure is shared, under the Provincial Contract, between the Imperial Indian Government and the Provincial Government, only the Provincial share appears as revenue or expenditure in the Provincial division of the accounts, though the whole revenue may be collected and the whole expenditure disbursed by officers of the Provincial Government.

The Incorporated Local Funds consist of the District Cess Funds in Lower Burma, the District Funds of Upper Burma, and the Taunggyi Improvement Fund. The term Local Fund is defined as follows in the Civil Account Code of the Government of India:—"When revenue derived from special sources is devoted to special objects and not to the general purposes of Administration, whether Imperial or Provincial, the revenue so derived forms a Local Fund."

Each of the twenty-one districts of Lower Burma, with the exception of the Rangoon Town District, has its District Cess Fund. The revenue of these funds is derived chiefly from what are known as Provincial Rates—an additional collection of 10 per cent. on the amount of Ordinary Land Revenue collected by the Government of Burma in Lower Burma—and from bazaar

stall rents. The expenditure is chiefly for roads and miscellaneous public improvements. The District Funds of Upper Burma are almost identical in general character with the District Cess Funds of Lower Burma. Each of the sixteen districts of Upper Burma has its District Fund, the chief sources of revenue being licenses for slaughter-houses and bazaar stall rents, and the chief items of expenditure being for roads and for miscellaneous public improvements.

The Taunggyi Improvement Fund is a Fund for the improvement of the civil station of Taunggyi, the headquarters of the Political Officer, Southern Shan States. The details of its revenue and expenditure are similar to those of the District Funds in Upper Burma.

The Excluded Local Funds are enumerated in the following table; and, as their transactions are not incorporated in the Provincial accounts, no further reference will be made to them beyond what is contained in this section. The character of the funds is sufficiently indicated by their names; but it may be noted that a cantonment is a military station where troops are maintained in permanent quarters, and that Town Funds are simply municipal Funds of towns not large enough to be declared municipalities.

RECEIPTS AND EXPENDITURE OF THE EXCLUDED LOCAL FUNDS,
1905.

(IN RUPEES.)

CLASS OF FUNDS.	REVENUE.			EXPENDITURE.	CLOSING BALANCE.
	Opening Balance.	Receipts.	Total Revenue.		
Cantonment Funds	11,945	221,997	233,942	203,314	30,628
Town Funds	168,917	409,670	578,587	393,164	185,423
Port Funds	216,711	336,562	553,273	349,868	203,405
Pilot Funds	100,857	379,774	480,631	359,920	120,711
Land Sale and Rent Fund	2,159	619	2,778	2,778	—
Educational } General	32,347	46,838	79,205	44,618	34,587
} College Fund	17,005	33,000	51,505	51,505	—
Rangoon Police Reward Fund	24	749	773	768	—
Rangoon Cantonment Garden F.	4,725	4,312	9,037	5,254	3,783
Rangoon Port Trust	969,496	2,388,990	3,358,486	1,793,183	1,565,303
Grand Total	1,525,086	3,823,131	5,348,217	3,204,372	2,143,845

Municipal Funds are dealt with in Chapter XVI. of this volume. They are administered by Municipal Committees, constituted under the Burma Municipal Act or under the Upper Burma Municipal Regulation. At the beginning of 1906 there were in Burma 41 Municipalities, 26 in Lower Burma and 15 in Upper Burma. With the exception of Rangoon and Moulmein all the Municipalities bank with the Government, though their transactions are not incorporated in the general accounts of the Government.

GENERAL FINANCIAL STATISTICS.

In this and in the following sections of this chapter, unless the contrary is expressly stated, the transactions of Excluded Local Funds and Municipalities are not included in the statistics or in the comment thereon, the terms Total Revenue, Total Expenditure, etc., being used in the sense adopted in the general accounts of the Government; that is, as including items under Imperial, Provincial, and Local, Incorporated, heads.

The following table represents the gross receipts and expenditure in the years 1900-01 and 1904-05 under all heads, including Excluded Local Funds and Municipal Funds:—

GROSS RECEIPTS AND EXPENDITURE OF BURMA DURING 1900-01
AND 1904-05.*
(IN RUPEES.)

Class of Account.	Total of	1900-01.	1904-05.
Imperial	Receipts	37,212,289	55,583,945
	Expenditure	10,211,878	14,157,339
Provincial	Receipts	36,479,832	38,597,264
	Expenditure	34,993,377	40,189,972
Incorporated Local	Receipts	2,393,855	2,795,759
	Expenditure	2,388,061	2,774,142
Excluded Local	Receipts	3,027,119	3,823,131
	Expenditure	2,857,261	3,294,372
Municipal	Receipts	6,651,796	7,438,015
	Expenditure	5,619,165	8,015,769
Total	Receipts	85,764,911	108,240,114
	Expenditure	56,069,742	68,341,594

*There are some slight discrepancies between the figures given in this table and those given in Appendix M. These are due to certain small adjustments which are included in one set of figures and not in the other. Both sets of figures are taken from official tables.

It will be noticed that the figures for revenue and expenditure under each head, except "Imperial," balance within a few hundred thousand rupees, whereas under "Imperial" there appears to be a large surplus—of many millions of rupees—of revenue over expenditure. In 1904-05, for example, there is an apparent surplus under "Imperial" of Rs. 41,428,606. This sum does not, however, represent a surplus. It represents the amount paid by Burma to the Imperial Indian Government to cover such expenditures on account of Burma—Army, Pensions, Home Charges, etc.—as are discharged by the Government of India; and the profits derived by the Government of India from the working of the Burma State Railways.

The finances of Burma may now be approached from another standpoint in order that it may be shown what taxation falls upon the people and what the administration of the country costs in its various branches. For the purpose of this inquiry Municipal and Excluded Local Funds are left out of the account, since they represent transactions which are not ordinarily included in any country in the statistics of Government revenue and expenditure, and are not so included in Burma.

By reference to Table II., Appendix M, it will be seen that the revenue of Burma is divided under twenty-four heads; and an examination of these heads shows that the greater number of them do not represent taxation, but represent receipts not in the nature of taxation. For instance, the receipts from the State Railways, from State Forests, from the sale of jail manufactures, are not in the nature of taxation.

The question of revenue from taxation and from non-taxation sources is discussed by Sir W. W. Hunter in *The Imperial Gazetteer of India*, 2d edition, Vol. VI. pp. 457 *et seq.*; and by Sir John Strachey in *India: Its Administration and Progress*, pp. 119 *et seq.*

In *The Imperial Gazetteer*, 2d edition, Vol. VI. pp. 296-300 and pp. 459-463, there is an interesting account of the system of taxation established in India by the Mughal Emperors and a comparison of taxation under the Mughals and the British.

The revenue from taxation falls under the eight heads shown in the following table, all other revenue being derived from commercial transactions under the control of the Government, from payment for services rendered, from judicial fines, and from a few minor heads of non-taxation receipts.

REVENUE OF BURMA DIVIDED INTO RECEIPTS FROM TAXATION AND RECEIPTS FROM OTHER SOURCES, 1905.

(IN RUPEES.)

Total revenue of Burma in the official year 1904-05, Rs. 96,562,298.

Head of Taxation.	Amount.	Receipt heads other than Taxation.	Amount.
Land Revenue	37,075,481	Forests	8,050,756
Opium	649,480	Registration	185,161
Salt	1,638,131	Tribute	522,292
Stamps *	3,314,220	Interest	49,062
Excise	7,281,670	Post Office	29
Provincial Rates	1,772,093	Courts of Law	488,263
Customs	14,657,838	Jails	427,581
Assessed Taxes	1,403,015	Police	450,615
		Marine	526,587
		Education	75,542
		Medical	58,679
		Mine Departments	3,876
		Miscellaneous	1,051,289
		Railways	15,148,710
		Irrigation	223,996
		Other Public Works	599,481
Total receipts from taxation	67,791,838	Total receipts from other sources	28,770,460

At the census of 1901 the population of Burma, exclusive of the Shan States, was returned as 9,353,180. The Shan States

Rate of Taxation
per Capita.

do not concern us at present, since no taxation is imposed in the Shan States for the purposes of the Government of Burma.

Allowing for a moderate growth of population since the census of 1901, it may be safely assumed that the population of Burma, exclusive of the Shan States, was 9,500,000 in 1905, rather more than less. The total revenue from taxation in 1905 works out, therefore, at almost exactly $7\frac{1}{4}$ rupees *per capita*, equal to 9 shillings and 6 pence, British currency, or 2 dollars and 28 cents, United States currency.

This estimate of the rate of taxation is based upon the supposition that the Land Revenue represents a tax. As a matter of fact, a large portion of the Land Revenue would be more accurately described as rent than as a tax, since many thousands of people in Burma occupy their land as peasant proprietors, paying no other charges on their land than the Land Revenue collected

* Almost entirely Court Fee stamps and commercial stamps.

by the Government. A detailed account of the Land Revenue System is given in the following chapter.

If for the revenue from taxation we substitute the total receipts of the Government of Burma from all sources, we find that the

Rate of Total Revenue per Capita.	Government receives a fraction over 10 rupees <i>per capita</i> of the total population of the Province, equal to 13 shillings and 6 pence, British currency, or 3 dollars and 24 cents, United States currency.
--------------------------------------	--

In order to arrive at a satisfactory method of estimating taxation for purposes of comparison with other countries, the *per capita* calculation must be discarded,

Per Capita Figures no True Index of Taxation.	for it affords no fair basis of comparison. It is evident that the same <i>per capita</i> taxation may in one country be extremely low and in another extremely high. To take an example, it is clear that 5 dollars <i>per capita</i> would be a very light rate of taxation in the United States, a country in the highest stage of industrial and general economic development, where the average annual income of adult males must reach a sum not less than 500 dollars and probably nearer 750 dollars. If we take the average, for the purpose of our illustration, at only 500 dollars, a tax of 5 dollars represents but 1 per cent. of the income. But a tax of 5 dollars <i>per capita</i> in the State of Pahang, where the average income of the male adult certainly does not exceed 25 dollars, would be a very heavy tax, since it would represent one-fifth of the income.
--	---

There appears to be another method of estimating the weight of taxation, which, if not perfectly satisfactory, will give a close approximation, and enable us to gain a fair idea of the relative weight of the burden in the various countries which

An Alternative Method of Estimating Taxation.	are to be dealt with in this Report. This method is to take as a standard the ratio of the total taxation to the total value of exports. To persons accustomed to dealing with financial problems in non-tropical countries this method will, at first glance, appear most untrustworthy. Nor could any method be more unsatisfactory for a country situated in Europe or in North America, for in such countries the value of exports represents but a very small fraction of the total agricultural and industrial product. In tropical countries, however, this condition is entirely reversed, the amount of commodities of local produce and manufacture retained for home consumption representing but a very small fraction of the total product. To put the matter
--	--

in a concise formula, in non-tropical countries the internal trade represents the bulk of the economic activity of the people, in tropical countries the bulk of the economic activity of the people is represented by the external trade.

It is easy to see why this is the case. The standard of living in a non-tropical country is out of all comparison higher than the

Standard of Living in
Tropical and in Non-
tropical Countries.

standard in a tropical country. If we take only the three great necessities,—clothing, housing, and food,—it must be clear to any one who has lived in

tropical and in non-tropical countries that for these three items, which represent the bulk of expenditure for a European or an American, the tropical man expends next to nothing. In the countries with which this Report is concerned the average value of a house, all classes of the population being included, cannot be as high as \$50: the value of food consumed by each person per annum certainly does not exceed \$15; and the value of clothing used by each person in a year is probably under \$5. We should in all likelihood be greatly overestimating the cost of living in the Indo-Malayan countries if we assumed that each person spent \$5 for housing, \$15 for food, and \$5 for clothing, or a total of \$25 a head for all the ordinary necessities of life.

In the above calculation I am assuming that this amount of money is actually spent; that is to say, that it represents transactions between persons and indicates a movement of money. But as a matter of fact, except in urban areas, the house, the greater part of the food, and a considerable share of the clothing are provided by the labour of the family, and no movement of money occurs.

Without entering into the question of luxuries, it is quite clear that, as far as internal trade is concerned, tropical and non-

Internal and
External Trade.

tropical countries are on an entirely different basis. In the former the industries which supply the people, through the medium

of paid labour, with housing, clothing, and food, are insignificant: in the latter the furnishing of these necessities employs a large proportion of the population, and represents an enormous internal trade.

In the Indo-Malayan countries nearly the whole of the money which is received by the people in return for their labour—that is to say, the bulk of the money out of which the Government draws its revenue—depends ultimately upon the value of the export trade. If we take Burma as an example, it is seen that the export of rice and teak involves the employment of the greater

part of the employed population of the Province, furnishes their wages, and provides the bulk of the money on which the Government, directly or indirectly, levies its taxes.

What is true of Burma is true of every tropical and sub-tropical country in which the mass of the wage-earning people are engaged in the production of export staples.

In the case of the Straits Settlements and Hong Kong a modification of this theory is necessary; but it is a modification which only serves to strengthen the force of the main argument. In these places there is a comparatively insignificant export of local produce and manufactures, the bulk of the trade being made up of the handling of produce in transit. Taking Hong Kong as the more striking example, it is evident that the internal trade of the Colony is a negligible quantity. Ninety per cent. of the people earn their living in connection with the great fleet of ships passing through the port; and their earnings represent a charge upon the value of the goods in the holds of these vessels,—handling the cargoes, docking and repairing the ships, feeding and clothing the crews, doing the clerical work in the banks and commercial houses, which exist only because of the shipping. In fact, Hong Kong exists solely by reason of its external relations; and, if the transit trade were for any reason to cease, six months would see the Colony deserted. The modification, therefore, which must be made in the general theory I have advanced, is that in places like Hong Kong and the Straits Settlements, which exist chiefly through a great transit trade, taxation cannot be estimated solely on the basis of the value of exports, but upon the value of the total external trade, import and export. Hong Kong and the Straits Settlements, therefore, are very apt illustrations of the general theory that in the countries to be dealt with in this Report the internal trade represents a very small proportion of the economic activity of the people, and that taxation may be fairly estimated on the basis of the value of the external trade.

We may now approach the revenue of Burma from the standpoint of the relation which it bears to the value of the export

Relation of Taxation to
the Value of Exports.

trade. Taking in the first place the amount of taxation proper, it is seen that in the official year 1904-05 the taxation proper of Burma was, in round numbers, Rs. 67,800,000. The total value of the exports of merchandise from Burma in the official year 1904-05 was Rs. 243,753,000, approximately, excluding the inter-portal trade within the Province. The ratio of taxation to the value of exports was as 27.81 to 100.

If we now take the total revenue of the Government of Burma from all sources, it is seen that the receipts of the Government amounted in the official year 1904-05 to Rs. 96,562,000, which, worked out on the basis of the value of exports, gives a ratio of 39.61 to 100. The figures given in this and in the preceding paragraph afford a fair view of the relation between the Government finances and the general economic condition of Burma. However far this method of calculation may fall short of furnishing an accurate account of the absolute burden of Government finance upon the wealth of the people of Burma, it provides a much more satisfactory basis for a comparison between the finances of one country and another in Indo-Malaya than that reached by estimating the taxation *per capita*.

SOURCES OF PUBLIC REVENUE.

In the financial accounts of the Government of Burma the income of the Government is described under the head "Revenue and Receipts." The distinction is merely one of the source from which the income is derived. As it is a distinction which I do not propose to incorporate in the terminology of this volume, I may dismiss the matter by stating that "Revenue" represents that portion of the receipts of the Government which accrues in departments managed and controlled by Revenue authorities,—Land Revenue, Customs Revenue, Assessed Taxes, Salt Revenue, etc.,—whilst "Receipts" include all money paid into a Government Treasury in satisfaction of Government dues,—judicial fines, receipts from railways, irrigation works, school fees, from the sale of Government publications, etc.

Throughout this chapter, except where the contrary is stated, the word "Revenue" is used to indicate the Government Income as included in the official accounts under the head "Revenue and Receipts."

In Appendix M, Table II., the total gross revenue of Burma is given under twenty-four heads for each of the ten years 1895-96 to 1904-05. It is unnecessary to deal in detail with each of these heads, for more than 95 per cent. of the public revenue is derived from ten heads, leaving fourteen heads to cover less than 5 per cent. of the gross revenue. The ten heads which represent the great bulk of the revenue are the following: Land Revenue, Opium,

Salt, Stamps, Excise, Provincial Rates, Customs, Assessed Taxes, Forests, and Railways. The remaining fourteen heads are enumerated in Table I., Appendix M. Of the main heads enumerated above, three need not be dealt with here, for they are the subject of extended description elsewhere in this volume,—Land Revenue in Chapter XIII., Forest Revenue in Chapter XIV., and Railway Revenue in the section of Chapter XV. relating to Railways. The other main heads are included here.

The revenue derived under the main head Opium represents in fact only a very small proportion of the actual receipts in connection with opium. The principal receipts from opium fall under the heads of Duty and

Opium Revenue. License Fees under the main head of Excise (see page 575). The revenue under the main head Opium represents merely the value of opium sold by the Excise Department to licensed vendors, who may retail it to persons entitled to possess it; namely, to medical practitioners, pharmacists, native doctors, tattooers, non-Burmans, and, in Lower Burma only, to registered Burmans. Details of the method of opium regulation are given in Appendix N. The revenue received under the main head Opium during the official year 1904-05 was Rs. 649,480. The figures for the past ten years are given in Appendix M.

Salt Revenue is derived from an excise duty on locally manufactured salt and from customs duty on imported foreign salt.

Salt Revenue. The excise duty on locally manufactured salt is collected by levying a tax on the estimated capacity of the implements used in manufacture (iron cauldrons or earthen pots). The import duty is levied on both foreign salt and on salted fish, the latter furnishing a very small proportion of the duty. The rate of customs duty on foreign salt imported into Burma is one rupee per maund (82½ pounds avoirdupois), and the rate on salted fish is six annas per maund. In the official year 1904-05 the amount of Salt Revenue in Burma was Rs. 1,638,131, made up of Rs. 240,165 excise duty on locally manufactured salt and Rs. 1,397,966 duty on imported salt.

The Stamp Revenue of Burma falls under two main heads, Judicial Stamps and Non-judicial Stamps. To the former belong all stamps representing fees levied under

Stamp Revenue. the Court Fees Act. These fees are of two kinds, *ad valorem* fees and fixed fees; and they are levied on various documents issued by or presented to judicial and revenue officers in the Province, such as complaints, copies of judgments, probates of wills, petitions, bail-bonds, etc. The fees are stated in detail in Schedules I. and II. of the Indian Stamp

Act. Non-judicial stamps represent stamp-duty on instruments of various kinds declared to be liable to duty under the Indian Stamp Act, such as bills of exchange, insurance policies, leases, mortgages, promissory notes, etc. The fees are stated in detail in the *Burma Stamp Manual*. In the official year 1904-05 the amount of Stamp Revenue in Burma was Rs. 3,314,220, made up of Rs. 1,881,275 from the sale of Court Fee Stamps, Rs. 1,363,711 from the sale of non-judicial stamps, Rs. 16,277 from fines and penalties, and Rs. 52,957 from miscellaneous sources.

The Excise Revenue of Burma is derived from licenses for the sale and manufacture of spirits and other intoxicating liquors, for the sale of opium and other drugs, and

Excise Revenue. from excise duty on opium consumed in the Province. The total Excise Revenue during the official year 1904-05 was Rs. 7,281,670, made up of Rs. 2,915,928 from spirits and fermented liquor, Rs. 62,567 from fines, confiscations, and miscellaneous sources, and Rs. 4,303,175 from opium. The above figures are taken from the Finance and Revenue Accounts of the Government of India for the year 1904-05. They differ both in regard to the total sum and in regard to details from the figures given in the *Report on the Administration of the Excise Department in Burma* for the same year; but, as the total agrees with the total under the head Excise in a statement of revenue kindly furnished me in manuscript by the Government of Burma, I have accepted these figures rather than those of the Departmental Report. I may take this occasion of referring to a matter which has constantly been forced upon my attention during the

Apparent Discrepancies in the Official Reports. preparation of these volumes; namely, the apparent discrepancies in the figures given in various Government Reports dealing with the same subject. The statistics in regard to Excise Revenue serve as a convenient example. In the *Finance and Revenue Accounts* published by the Government of India the total Excise Revenue of Burma for 1904-05 is given as Rs. 7,281,670, whereas in the *Report of the Administration of the Excise Department in Burma*, published by the Government of Burma, the total receipts under Excise Revenue during the same year are given as Rs. 9,044,509, and the net revenue as Rs. 7,397,957. In the *Finance and Revenue Accounts* the Excise Revenue from opium is given as Rs. 4,303,175, made up of Rs. 21,553 for licenses and Rs. 4,281,622 for duty; but in the Departmental Report the total is given as Rs. 5,169,309, made up of Rs. 5,011,715 for duty and Rs. 157,594 for licenses. Without doubt these discrepancies are due to differences in classification

in the two sets of accounts; but no explanation is given in the accounts, and the investigator is confronted with apparently conflicting statements in regard to a number of points upon which a precise understanding is most desirable.

The Provincial Rates represent a cess of 10 per cent. on Land Revenue collections in Lower Burma. The rates are collected

Provincial Rates. in addition to the Land Revenue, and they are devoted to expenditure on roads, schools, hospitals, and general purposes of a local character. This item of revenue appears only in the Local section of the finance reports, and does not concern the Imperial and Provincial sections. In the official year 1904-05 the sum realised from Provincial Rates was Rs. 1,772,003.

The Customs Revenue of Burma is derived from duties on imports and from duties on exports, together with some small

Customs Revenue. miscellaneous items. The sums realised from import duties in 1904-05 are shown in the following table. The only export duty is that on rice. The duty is 3 annas per maund (82½ pounds) on rice exported from the Province to ports outside of British India. The sum realised from the export duty on rice in 1904-05 was Rs. 9,854,248.

CUSTOMS DUTY ON IMPORTS, 1904-05.

(In Rupees.)

Articles.	Duty collected.	Articles.	Duty collected.
Arms, Ammunition, and Military Stores	25,780	Chemicals, Drugs, Medicines, Narcotics, etc. . .	96,619
Beer, Spirits, Wine, etc. .	1,567,592	Cotton Manufactures . . .	729,139
Opium	199	Metals and Manufactures of Metals	335,673
Petroleum	175,169	Oils, excluding Petroleum .	5,254
Countervailing Duties on Sugar	5,203	Manufactured Articles . .	1,101,977
General Duty on Sugar . .	177,302	Raw Materials and Unmanufactured Articles . . .	110,493
Other Articles of Food and Drink	365,988	Total Duties on Imports	4,696,390

The only Assessed Tax in force in Burma is the Income Tax, which is levied under the authority of the Income Tax Act of 1886

Assessed Taxes; as amended to date. Any person whose income from all sources is less than one thousand rupees per annum is exempt from the payment of the Income Tax. There are a number of other exemptions, amongst which the most important are rents and reve-

nue derived from land which is used for agricultural purposes and is either assessed to land revenue or subject to local taxation, incomes derived from agriculture, salaries of officers and men of the military forces when the salary does not exceed five hundred rupees a month and the person concerned is employed on military duties. Civil servants of the Government are liable to the Income Tax. The rates at which the Income Tax is levied are as follows: on salaries and pensions, if the income amounts to Rs. 2,000 per annum, five pies in the rupee; if the income is less than Rs. 2,000, at the rate of four pies in the rupee; on the profits of companies, five pies in the rupee on the whole of the net profits; on interest on securities, five pies in the rupee, unless a certificate is produced showing that the annual income from all sources is less than Rs. 1,000, in which case no deduction is made, or, if a certificate is produced showing that the income from all sources is less than Rs. 2,000, in which case the rate is four pies in the rupee; on other sources of income not included in the above classes at the following rates:—

If the income is assessed at—

not less than	Rs. 1,000	but less than	Rs. 1,250	the tax shall be	Rs. 20
" " "	Rs. 1,250	" " "	Rs. 1,500	" " "	Rs. 28
" " "	Rs. 1,500	" " "	Rs. 1,750	" " "	Rs. 35
" " "	Rs. 1,750	" " "	Rs. 2,000	" " "	Rs. 42

On incomes assessed at Rs. 2,000 or upwards, five pies in the rupee.

Four pies in the rupee is equal to a rate of 2.08 per cent.; five pies in the rupee is equal to a rate of 2.60 per cent. The total revenue raised from Income Tax in the year 1904-05 was Rs. 1,403,015, which was obtained from about 16,000 persons.

COST OF COLLECTING THE REVENUE.

For the purpose of estimating the cost of collecting the revenue of Burma the distinction between "Revenue" and "Receipts" must be recalled. The expenditure of those departments which are distinctly revenue departments represents the cost of collecting the revenue; but in the administrative departments which are not revenue departments, in which the receipts accrue otherwise than through the collection of revenue, the expenditure represents the cost of administrative work, and cannot be properly described as the cost of collecting the receipts of those departments. The following table shows the receipts and expenditure of the revenue departments during the year 1904-05:—

RECEIPTS AND EXPENDITURE OF REVENUE DEPARTMENTS, 1904-05.

Head of Revenue.	Receipts (In Rupees).	Charges (In Rupees).	Percentage of Charges to Receipts.
Land Revenue	37,075,481	5,756,058	15.52
Opium	649,480	—	—
Salt	1,638,131	23,736	1.40
Stamps	3,314,220	126,826	3.80
Excise	7,281,670	1,024,268	14.06
Provincial Rates	1,772,003	59,983	3.32
Customs	14,657,838	394,798	2.68
Assessed Taxes	1,403,015	34,954	2.42
Forests	8,959,756	3,446,924	38.46
Registration	185,161	58,307	31.35
Total	76,936,755	10,925,854	14.20

No expenditure is shown against the head Opium in the *Finance and Revenue Accounts*. The revenue against this head represents the sale of opium to licensed vendors. The expenditure on account of these transactions is very small, and is charged to the Excise Department.

OBJECTS OF PUBLIC EXPENDITURE.

The public expenditure of Burma is classed under thirty heads; and the expenditure under each head for each of the past ten years is given in Table III., Appendix M, of this volume. Ten of these heads represent charges incident to the collection of revenue, and have been dealt with in the preceding section. Of the remaining twenty heads five may be briefly dismissed: Refunds and Drawbacks, which amounted to Rs. 477,836 in 1904-05; Assignments and Compensations, amounting to Rs. 423; Interest, Rs. 29,387; Post Office, Rs. 311,377, representing charges paid by the Government of Burma in respect of postal service in certain country districts, all other postal charges falling on the Imperial Indian Government; and Famine Relief, Rs. 228. In regard to the last head it may be mentioned that Burma has been practically free from famine, with the exception of the years 1896 and 1897, during which famine conditions prevailed over a small area in Upper Burma.

Of the remaining fifteen heads ten represent the salaries and expenses of the Civil Departments, three cover Public Works

(Irrigation, and Military and Civil Works), one covers that portion of the expenses of the State Railways which is charged against the Railway Revenue account, and one represents Miscellaneous Civil Charges.

The following table shows the proportion of the public expenditure which is devoted to the various objects with which the Government is concerned:—

PROPORTION OF PUBLIC EXPENDITURE DEVOTED TO EACH OBJECT,
1904-05.

Heads of Expenditure.	Amount of expenditure (Rupees).	Per cent. of total expenditure.
Refunds and Drawbacks	477,826	.84
Charges on account of Revenue collection	10,925,854	19.21
General Administration	1,456,854	2.57
Courts of Law	3,209,448	5.66
Jails	1,017,490	1.79
Police	10,118,678	17.85
Marine	1,056,320	1.86
Education	1,238,656	2.19
Ecclesiastical	114,767	.20
Medical	1,139,807	2.01
Political	435,156	.76
Scientific and Minor Departments	266,701	.46
Miscellaneous Civil Charges	1,944,120	3.43
Irrigation and other Public Works	13,110,708	23.13
Railways	9,686,337	17.09
Other items	341,415	.60
Forward on all items	—	.15
Total	56,600,047	100.00

All the more important heads of expenditure are dealt with in the departmental chapters of these volumes; that is to say, the operations of the various departments are described. The head General Administration comprises the charges on account of the salaries, allowances, and establishment of the Lieutenant-Governor, the Secretaries to Government, the Commissioners of Divisions, and several other high officials, and certain other small charges. The charges under the head Scientific and other Minor Departments include the cost of the Veterinary Department, the Archeological Department, Botanical and other Public Gardens, Experimental Cultivation, Public Exhibitions and Fairs, expenses in connection with the preparation of Gazetteers and statistical publications, with some small charges under sev-

eral minor heads. Under the head Marine are included the salaries and allowances of the establishment, the purchase of marine stores, the purchase and hire of vessels, the cost of light-houses and light-ships, and some charges under minor heads. Under the head Ecclesiastical are included the stipend of the Church of England Bishop, the pay of Church of England Chaplains, allowances to Bishops and Priests of the Church of Rome, charges for cemeteries, and miscellaneous charges. Under the head Miscellaneous Civil Charges the principal item is Stationery and Printing, the other large heads being Territorial and Political Pensions and Superannuation Allowances.

The expenditure under Irrigation and other Public Works and on Railways is dealt with in detail in Chapter XV. It is sufficient to note at present that more than 40 per cent. of the total public expenditure in Burma is devoted to Irrigation, Public Buildings, Roads, and Railways.

CHAPTER XIII.

THE LAND REVENUE SYSTEM

REFERENCES.

- Baden-Powell, B. H., C.I.E. *The Land Systems of British India*. 3 vols. Oxford, the Clarendon Press, 1892. The Burma system is described in Part VI. of Volume II.
- Nisbet, John. *Burma under British Rule—and Before*. Westminster, Constable, 1901, 2 vols., pp. 460 and 452.
- Land Revenue Policy of the Indian Government. Published by order of the Governor-General of India in Council. Calcutta, Govt. Press, 1902, pp. 6 + 291.
- The Lower Burma Land Revenue Manual, 1901. Rangoon, Govt. Press, 1901, pp. 362.
- The Upper Burma Land Revenue Manual, 1905. Rangoon, Govt. Press, 1905, pp. 253.
- Report on the Land Revenue Administration of Burma. Govt. Press. Annual.

For further references consult the Bibliographical Appendix.

Before proceeding to describe the Land Revenue System of Burma, some account may be given of the general principles upon which the Land Revenue policy of the Government of India is based. These principles have been embodied recently in a Resolution by the Governor-General of India in Council, dated January 16, 1902; and it is from this admirable monograph that I have taken the following pages, omitting a few paragraphs which do not refer to Burma, and condensing some paragraphs which refer chiefly to India proper. The Resolution is described in a Prefatory Note as "an authoritative exposition of the principles on which the Land Revenue Administration in India has been based in the past, and by which it will be guided in the future."

LAND REVENUE POLICY.

(Extracts from the Resolution issued by the Governor-General of India in Council on the 16th of January, 1902.)

The attention of the Government of India has lately been called, in a special manner, to the subject of the Land Revenue administration of this country, partly by the series of almost unprecedented calamities which have in recent years assailed the agricultural population, partly by a number of representations which have reached them from sympathetic friends of India, who have

Origin and Importance of the Inquiry.

devoted careful study to the above-named problem. In the course of 1900, Mr. R. C. Dutt, C.I.E., formerly Acting Commissioner of Burdwan, addressed to His Excellency the Viceroy a series of letters (subsequently published in the form of a book) concerning the Land Revenue system of the different provinces, and he submitted certain recommendations as to future policy and action. At a little later date the Secretary of State transmitted to the Government of India a memorial signed by certain retired officers of the Indian Civil Service, formulating a somewhat similar list of suggestions.

2. The Government of India welcomed the opportunity thus afforded to them of instituting renewed inquiries into a matter that has, for more than a century, been the subject of anxious discussion. The well-being of the agricultural community in India, constituting as it does so overwhelming a proportion of the entire population of the Indian continent, and contributing so large a quota to the Indian revenues, cannot fail to be to the Government a matter of the most intimate concern; nor can it be denied that upon the incidence of the land revenue collections must the prosperity of those classes in a great measure depend. The question may be recognised therefore as one of the highest national importance, transcending the sphere of party or sectional controversy, and demanding at once the most exhaustive scrutiny and the most liberal treatment. When further it appeared that the main contention submitted to the Government by certain of its critics was that the intensity and frequency of recent famines are largely due to poverty caused by over-assessment—a contention the gravity of which cannot be disputed, seeing that it is tantamount to an arraignment of the policy that has been pursued by successive Indian administrations for an entire century—and when this general proposition was accompanied by a series of detailed allegations as regards the system of assessment in vogue in the various parts of the country, it seemed to the Government of India that the opportunity should not be lost of definitely examining the grounds for these assertions; and the letters above referred to were accordingly referred to the Local Governments for their consideration and report. Their replies have been received and are annexed to this Resolution.* The Governor-General in Council is grateful for the labour which has been bestowed upon their preparation, and he hopes that in the comprehensive review of land revenue policy throughout India which has thereby been obtained may be found a corrective to many current misapprehensions and a source of more trustworthy knowledge in the future.

3. On the present occasion he is, however, less concerned with the individual statements or misstatements that may have been made with regard to particular areas—the replies of the Local Governments which show that an imperfect acquaintance with facts has been the source of much confusion and misunderstanding—than he is with the larger questions affecting our land revenue policy as a whole, and the connection which it is alleged to have with the recurrence and intensity of famine in India. It does not seem necessary to discuss the economic fallacy that any alteration in the system or scale of assessments can permanently save an agricultural population from the effects of climatic disaster. The relation of cause and effect between a good

**Alleged Connection
between Revenue
Policy and Famine.**

particular areas—the replies of the Local Governments which show that an imperfect acquaintance with facts has been the source of much confusion and misunderstanding—than he is with the larger questions affecting

*Not reproduced in this volume.

rainfall, abundant crops, and agricultural prosperity, is not more obvious than is that between a bad monsoon, deficient produce, and a suffering people. When the vast majority of the inhabitants of a country are dependent upon an industry which is itself dependent upon the rainfall, it is clear that a failure of the latter must unfavourably, and in extreme cases calamitously, affect the entire agricultural community. The suspension of the rains means a suspension of labour; the suspension of labour means a drying up of the means of subsistence; and the latter is necessarily followed by distress and destitution. There is no industry in the world the sudden interruption or the temporary destruction of which is not attended by impoverishment and suffering; and there is no country in the world, where the meteorological and economic conditions are at all similar to those prevailing in India, that could by any land revenue system that might possibly be devised escape the same results.

4. Nevertheless, if prevention of the inevitable consequences of drought be an ideal incapable of attainment, mitigation is manifestly an object worthy of the closest attention of the Government. It cannot but be their desire that assessments should be equitable in character and moderate in incidence; and that there should be left to the proprietor or to the cultivator of the soil—as the case may be—that margin of profit that will enable him to save in ordinary seasons and to meet the strain of exceptional misfortune. Such aspirations must be even more forcibly impressed upon the Government at a time when, owing to the prolonged continuance of adverse circumstances, the agricultural population has passed through a phase of almost unequalled depression, and needs the fullest measure of encouragement that it is possible to afford. It is with the object of demonstrating how far these objects are capable of being realised under the existing system, or to what extent the latter is susceptible of improvement, that the Governor-General in Council now proceeds to examine the general charges that have been brought against it, and the individual modifications that are proposed.

5. By the ancient law of the country—to quote the opening words of Regulation XIX. of 1793, by which the Permanent Settlement was created in Bengal

The Two Kinds of Settlement, Permanent and Temporary. —the ruling power is entitled to a certain proportion of the produce of every acre of land unless it has transferred or limited its rights thereto. The procedure by which that proportion is determined is styled a Settlement of the Land Revenue. A Settlement is of two kinds: permanent, by which the demand of the State is made fixed and unalterable forever; temporary, under which the State demand is revised at recurring periods of greater or less duration. Inasmuch as all agricultural land in India must fall within either the permanently-settled or the temporarily-settled areas, it is desirable to consider what are the criticisms or proposals that have been made with reference to each of these two classes. The permanently settled districts, as is well known, cover the greater part of Bengal, parts of the North-Western Provinces and Madras, and a few other isolated tracts. At an earlier period the school of thought that is represented by the present critics of the Government of India, advocated the extension of the Permanent Settlement throughout India; and, although this panacea is no longer proposed, the Government of India are invited by Mr. Dutt to believe

that, had such a policy been carried into effect 40 years ago, "India would have been spared those more dreadful and desolating famines which we have witnessed in recent years." It is also stated by the latter in his letter upon Land Settlements in Bengal that in consequence of the Permanent Settlement in that province the cultivators are more prosperous, more resourceful, and better able to help themselves in years of bad harvest, than cultivators in any other part of India, that agricultural enterprise has been fostered, cultivation extended, and private capital accumulated, which is devoted to useful industries, and to public works and institutions. The hypothetical forecast above recorded is not rendered more plausible to the Government of India by their complete inability to indorse the accompanying allegations of fact. Bengal, and particularly Eastern Bengal, possesses exceptional advantages in its fertility, in its comparative immunity from the vicissitudes of climate to which other parts of the country are liable, in its excellent means of communication, in its enjoyment of a practical monopoly of the production of jute, and in the general trade and enterprise which radiate from its capital city. But neither these advantages nor the Permanent Settlement have availed to save Bengal from serious drought when the monsoon failure, from which it is ordinarily free, has spread to that part of India.

7. It is, however, to the temporarily settled districts that the bulk of criticism has been directed, and to this branch of the subject the Governor-General

**The Two Classes of
Temporary Settlements,
Zemindari and Ryotwari.**

in Council will now turn. The two subdivisions of this category will be successively examined; the zemindari tracts (in some provinces called *malguzari* and *talukdari*), where the landlord pays the land revenue to the State, whether he cultivates the land himself or by means of rent-paying tenants; and the *ryotwari* tracts, where the cultivator pays directly to the State.

[Paragraphs 8-13 of the Resolution relate to the zemindari tenure, which is the prevailing form of land tenure in the Central Provinces, the North-western Provinces and Oudh, and the Punjab. The general effect of this portion of the Resolution is that in the zemindari tracts, where the landlord pays the land revenue and the State does not collect directly from the cultivator-tenant, it had been the native custom for the State to appropriate as its share of the net rent paid by tenants ten-elevenths, leaving one-eleventh as the share of the landlord; that by Regulation II. of 1793 the Government of India followed the indigenous custom; that they soon began to moderate the severity of the practice; and that at the present time, although the standard of 50 per cent. of the net assets has nowhere been laid down as the fixed and immutable standard for the Government share, there has been and is a growing tendency to approximate to it, and that in special circumstances a very much lower share is taken. It is further noted that, as far as the cultivator-tenant is concerned, his interests require protection against the landlord in at least as great a degree as those of the landlord require protection against the Government; and that the Government has already taken steps to safeguard the interests of the ryots, and is anxious to go much further in this direction.]

14. The Governor-General in Council now passes to the consideration of those parts of the country where, under temporary settlements, the ryotwari or peasant proprietary form of tenure prevails, and where the cultivator pays directly to the State. The principal illustrations of this category are the greater parts of the Presidencies of Madras and Bombay, and the Provinces of Burma and Assam.

Suggested Reforms in Ryotwari Settlements: Revenue to be a Definite Share of Gross Produce.

16. The Government of India believe it to be an entirely erroneous idea that it is either possible or equitable to fix the demand of the State at a definite share of the gross produce of the land. There is great practical difficulty in ascertaining what the average produce is. It is dependent upon a number of varying factors, such as the industry and resource of the cultivator, the nature of the crop, the capacity, security, and situation of the holding, and the chance of the seasons. The share of the gross

produce which a crop can afford to pay must stand in close relation and in inverse proportion to the amount of expenditure which has been required to grow it, and this will vary very greatly, for instance, in the cases of sugarcane and of wheat. In zemindari districts, accordingly, rental value, and not produce, has for the last fifty years been adopted as the basis of assessments, although the latter have commonly been checked by comparison with produce, with the result, as a rule, of showing that, judged by that standard, they were unreasonably low. In the ryotwari provinces of Madras and Burma, the attempt has been made to fix assessment rates in accordance with produce, but the rules giving effect to this principle fence it round with so many qualifications as practically to involve its abandonment. It is now nearly forty years since the alternative standard of half the net produce was introduced in Madras, the reason being that the gross produce standard, while it favoured the more fertile, pressed with extreme severity upon the poorer lands. But even the standard thus adopted has not been worked up to in practice. There and elsewhere the net produce has been valued at much less than the current money rates, the out-turn per acre deduced from crop experiments has been notoriously underestimated, and liberal deductions have been made for unprofitable cultivation, distance from markets, and vicissitudes of season, so that the rates in actual use for assessment are considerably below the nominal share. There has been a similar reduction in the theoretical measure of assessment, which is also one-half of the net produce, in Burma; and the last assessment report received from the Hanthawaddy district shows that the assessment actually imposed fell short of a quarter (not one-half) of the net produce by nearly 20 per cent. The truth is that assessment of land revenue is subject to so many complicated and varying conditions that any attempt to reduce it to an exact mathematical proportion either of gross or of net produce would not only be impracticable, but would lead to the placing of burdens upon the shoulders of the people, from which, under a less rigid system, if sympathetically administered, they are exempt. Nor must the influence of the personal equation be ignored.

Impracticability of the Suggestion that the Land Revenue should be fixed at a Share of the Gross Produce.

Those who are familiar with the realities of assessment know well that among Settlement Officers there is a growing inclination towards leniency of assessment, and that this spirit is encouraged by the avowed policy of Government, of the considerateness of which the progressive reduction of the State demand already indicated affords conclusive proof.

The more the officers of Government know of the people, and the more intimate their mutual relations become, the less likelihood is there of severity in the enforcement of public dues. In no official relation does a member of the Public Service come into such close contact with the people as in Settlement work; and it cannot be his desire to aggrieve those among whom he is spending some of the most laborious years of his life, or to initiate a Settlement which, after a short interval, will break down. Every natural instinct and every recent injunction of the Supreme Government urge him to reasonableness and moderation.

17. Nothing, indeed, can be more clear than that, while the net produce rule itself calls for, and is habitually subject to, modifications in the interest of the cultivator, the gross produce standard recommended by the memorialists would, if systematically applied, lead to an increase of assessments all round. The Report from the Central Provinces shows that the proportion to produce of the gross rental ranges from one-sixth to one-fourteenth, and that the enforcement of any such standard would double the liabilities of the ryots. The Bengal Report gives statistical reasons for believing that rents are generally much below one-fifth of the gross produce, and indicates that ryots on Government temporarily settled estates are, judged by this standard, better off than under proprietors with a permanent settlement. The Madras reply says that, "if Government took one-fifth of the real gross produce from its ryots, it would fully double its present land revenue, exclusive of cesses, but inclusive of the total charge for water." In the ryotwari tracts of the Punjab the proportion taken by Government nowhere exceeds one-fifth of the gross produce, and is more often one-seventh or one-eighth, or even less. Similar conclusions are borne out by the Report of the recent Famine Commission, in which it is stated, as the result of special inquiries, that in the Central Provinces the incidence of land revenue is less than 4 per cent. of the average value of the produce, that in Berar it is about 7 per cent., in Ajmer about 10 per cent., in the Hissar district of the Punjab $3\frac{1}{2}$ per cent., in other parts of the Punjab 7 per cent., except in the Delhi district, where it is 10 per cent.; in the Deccan probably above 7 per cent., in the Panch Mahals 5 per cent.; and in Gujarat alone (where the profits on cultivation are very high) 20 per cent.; or the equivalent of the one-fifth pleaded for in the memorial. Since then it has been conclusively established that, under the existing practice, the Government is already taking much less than it is now invited to exact, and since the average rate, so far from showing an inclination to enhancement, is everywhere on the downward grade, the Governor-General in Council is unable to accept a proposal which could only have consequences the very opposite of those which are anticipated by its authors.

18. The next recommendation to which the attention of the Government

of India has been drawn is that no term of settlement in temporarily settled

The Term of Settlement: districts should be for a shorter period than 30 years. The history of settlements may briefly be summarised as follows. In Bombay the thirty years' term was introduced by the

Suggested Minimum of 30 years. Court of Directors so far back as 1837. From there it was extended to Madras and the North-Western Provinces, where it has been the standard period for the last half century. The same principle was followed in an extension of the Orissa Settlement in 1867, and in confirming most of the settlements made in the Central Provinces between 1860 and 1870. But it never came into general use in the Punjab, where, in the greater part of the province, the shorter term of twenty years has been the recognised rule. The question was exhaustively examined in 1895, when it was finally decided by the Secretary of State that 30 years should continue to be the ordinary term of settlement in Madras, Bombay, and the North-Western Provinces, that in the Punjab twenty years should be the general rule (thirty years being admitted in some cases), and in the Central Provinces twenty years also. A thirty years' term has been adopted for the recent re-settlement of Orissa. In backward tracts, such as Burma and Assam, and in exceptional circumstances such as exist in Sind, shorter terms are permitted.

Considerations which determine the Term of Settlement. The reasons for this differentiation are familiar and obvious. Where the land is fully cultivated, rents fair, and agricultural production not liable to violent oscillations, it is sufficient if the demands of

Government are readjusted once in thirty years, i.e., once in the lifetime of each generation. Where the opposite conditions prevail, where there are much waste land, low rents, and a fluctuating cultivation, or again where there is a rapid development of resources owing to the construction of roads, railways, or canals, to an increase of population, or to a rise in prices, the postponement of re-settlement for so long a period is both injurious to the people, who are unequal to the strain of a sharp enhancement, and unjust to the general taxpayer, who is temporarily deprived of the additional revenue to which he has a legitimate claim.

19. It may further be pointed out that many of the objections at one time urged to revisions of settlement have become, or are fast becoming, obsolete.

Improvements in Procedure Rendering Re-settlements less Disturbing. The process of re-settlement itself is more rapid and less disturbing than was formerly the case. Where the re-settlement of a district thirty years ago lasted for six or eight years, the work is now, in a large district, usually completed in about four years and

often in less. The improvement in the village records, and their punctual correction and maintenance up to date, have to a large extent obviated the necessity for detailed surveys, and for those local inquiries by subordinate officers which were in former times a fruitful source of harassment and extortion to the agricultural community. The aim of the existing policy is to exclude underlings from all connection either with the work of assessment or with the preliminary investigations leading up to it, and to devolve upon the Settlement Officer and his gazetted assistants all the negotiations with the people. The

Government of India and the Local Governments will always be ready to carry this policy to further developments, their object being to simplify the maintenance, correct and up to date, of the village papers, and thereby to secure an authentic record of the rights and privileges of the people, as well as a trustworthy instrument for the speedy determination of the fair claims of the Government on the land.

[Paragraph 20 deals with the question of the exemption of improvements from assessment. It is pointed out that, though this principle finds no support in the history of India under native rule, it has been accepted by the Government of India, and that rules securing such exemption are now in force over a great part of India. The Government of India intends to take the whole matter into further consideration, in consultation with the Local Governments, with a view to framing rules that may stimulate the expenditure of private capital upon the improvement of the land, and secure to those who profit by such opportunities their legitimate reward.]

**Exemption of
Improvements
from Assessment.**

tends to take the whole matter into further consideration, in consultation with the Local Governments, with a view to framing rules that may stimulate the expenditure of private capital upon the improvement of the land, and secure to those who profit by such opportunities their legitimate reward.]

21. The question of the effect upon the domestic life of the community of long as against short settlements has been the subject of much discussion. It

**Effect of Long as
against Short Settle-
ments in Increasing
Resources of the
People.**

may be regarded as certain that long-term settlements leave more money to the people, however large be the revenue enhancement at the close. On the other hand, short-term settlements, which are the familiar practice of Native Rulers, excite less discontent, when not associated with inquisitorial proceedings. An increase of liabilities which comes once in a generation is said by some to be more acutely resented than one which has been rendered familiar by more frequent repetition. Upon this point it is difficult and perhaps unnecessary to pronounce: attention should, however, be called to a concession made by the Government with a view to reducing its own share of the produce, and leaving more to the landholder. Formerly the basis of assessment was the anticipated average yield of the land during the coming period of settlement. Now it is the actual yield at the time of assessment, so that the landowner enjoys to the full any new advantages that may accrue either from his own outlay or from outside circumstances, in the interval before the next revision is made. Assessment upon actual, as distinct from prospective, assets has thus become a cardinal principle of the land revenue policy of Government

**Suggested Limitation
of Government
Enhancements to rise
in Value Due to (1)
State Improvements,
(2) Rise in Prices.**

22. In the foregoing paragraphs a partial answer has been given to the next prayer of the memorialists that in ryotwari tracts "there should be no increase in assessments except in cases where the land has increased in value, (1) in consequence of improvements in irrigation works carried out at the expense of Government; (2) on account of a rise in the value of produce, based on the average prices of the thirty years next preceding such revision." The entire contention will now be examined.

The principle that the State in India has a right to share in the produce of the land carries with it the right to share in any increment of the

produce or its value. In the case of increments resulting from the expenditure of private labour or capital, this right, as has already been pointed out, has been altogether waived in some provinces, and materially limited in others. But it can scarcely be contended that such a surrender should equally apply to improvements produced by the growth of population, by the gradual development of the country, by the introduction of new staples or by an increase in the productivity of the soil and in the value of its produce, more particularly if the latter are themselves the result of an expenditure upon irrigation or communications that has been incurred by the State. The concession to the landlord or the tenant of a complete monopoly of the profits of all improvements of the soil in perpetuity, whether created by himself or not, would be a doctrine not merely economically unsound, but without any foundation in native custom or any precedent in history. Whatever be the case as regards zemindari districts, it is now, however, urged that in ryotwari areas no ground of enhancement but a rise in price should in future be allowed. Attention has already been called to the limitation that has been placed by Government upon the discretion of its officers in respect of changes in land classification as a possible basis of enhancement. In Bombay no change in a classification once definitely accepted is permitted by the law. In Madras, though the Government of India, acting under the instructions of the Secretary of State in 1885, have declined to give a pledge against future revisions of classification, they have intimated their cordial acceptance of the principle that the existing classification, if found to be in the main equitable, shall, on resettlement, not be disturbed. In these circumstances, to deny the right of the State to a share in any increase of values except those which could be inferred from the general tables of price statistics—in itself a most fallacious and partial test—would be to surrender to a number of individuals an increment which they had not themselves earned, but which had resulted, partly from the outlay of Government money on great public works, such as canals and railways, partly from the general enhancement of values produced by expanding resources and a higher standard of civilisation.

23. The concluding proposal, which it is the duty of the Governor-General in Council to examine, and which, in slightly different shapes, finds a place

<p>Limitation of Cesses on Land</p>	<p>in both memorials, is that no cesses should be imposed on the rental of land, except for purposes directly benefiting the land, and that a limit should be fixed beyond which it may not be permissible to surcharge the land tax with local taxation. These cesses which are levied for the construction and repair of roads, the upkeep of schools and dispensaries, and other similar duties appertaining to Local Government Boards, are generally assessed on the assets or rental value, since the land revenue would, in many provinces, be an unfair basis of distribution. But before going into this question, the Governor-General in Council desires to record an emphatic dissent from the opinion that primary education is not a proper object of local taxation, and that such taxation should be limited to objects directly connected with the land. The aim of local taxation is the benefit of the community, and the spread of elementary education amongst the cultivating classes is the surest preventive of the carelessness which allows so large a proportion of the increased value that settled</p>
---	---

Government and improved communications have given to the produce of agricultural industry, to slip through the fingers of the people.

24. In the ryotwari provinces of Bombay and Madras and in Coorg the incidence of the Local Rates (for roads and schools) is precisely that in force

**Present Incidence
of Local Rates.**

in Bengal ($6\frac{1}{4}$ per cent. on the rental). This comparison involves the assumption that ryotwari revenue is the equivalent of rent; but, as a matter of fact, the extent to which sub-letting prevails in ryotwari provinces indicates that the revenue is substantially below the rental value, and the Local Rates are consequently below the Bengal level. In Lower Burma the Local Rates amount to 10 and in Assam to 8.3 per cent. on the ryotwari revenue. Though higher than elsewhere, they are within the maximum suggested in the memorial.

The general conclusion of the Government of India is that there is no reason for thinking that local taxation, if properly distributed, is on the whole

**General Conclusions
as to Burden of
Local Taxation.**

either onerous or excessive, while, as a general rule, it already falls short of the limit which the memorialists would propose to fix. But there are grounds for suspecting that the distribution is often unfair; and that the landlords shift on to the tenants that share of the burden which is imposed by the law upon themselves. In the present backward condition of so many of the people, it is not possible effectively to redress this injustice; and the question presents itself whether it is not better, as opportunities occur, to mitigate imposts which are made to press upon the cultivating classes more severely than the law intended. The Government of India would be glad to see their way to offer such relief.

27. The Governor-General in Council has now reviewed the particular suggestions of Mr. Dutt and the memorialists. There remains to be noticed the

**Detailed Examination of
Alleged Connection of
Revenue Assessments
with the Famine-resisting
Resources of the People.**

underlying idea by which they have all alike been animated, and which, in some parts of the former's writings, has found definite expression. It is the theory that the amount of the land revenue taken by the Government of India, in one form or another, from the people is mainly responsible for famine, with its corollary that, were the assessments diminished, famine would be less frequent, or that at least, when they do occur, they would cause infinitely less suffering. The Governor-General in Council does not believe that countenance to this theory can be derived either from the recorded facts of history, or from the circumstances of the present day. The evidence that has been adduced in this Resolution testifies to a progressive reduction of assessments, extending throughout the last century, and becoming more instead of less active during its second half. If then the severity of famine be proportionate to the weight of assessments, the famines in the earlier part of the nineteenth century ought to have been incomparably more serious than towards its close; whereas the contention is familiar that the reverse has been the case. Again, the contention that in recent famines the parts of India that suffered most severely were the parts that were most highly assessed, finds (with the exception of Gujarat, which had not been seriously famine-stricken for a century and was soft and unprepared) no sup-

port in fact, and was expressly disowned by the recent Famine Commission. It is conclusively disproved in the case of the Central Provinces by the evidence of the Chief Commissioner that, in the famine of 1899-1900, the districts which felt the famine pressure most acutely were those which had been exempted from paying the revised assessments, introduced at the previous revision; while the districts that suffered most from the famine of 1896-1897 were those in which there had been no enhancement for forty years.

28. The fallacy in question is the result of an imperfect appreciation of the smallness of the land revenue compared with the enormous losses result-

**Agricultural Losses
resulting from Famine.**

ing from a widespread failure of crops. It has been estimated that in the Central Provinces the agricultural classes have lost 40 crores of rupees, more than 26 millions sterling, during the past seven years—an amount equivalent to the total land revenue of fifty years; while seven years' land revenue would be required to recoup the State for its famine expenditure in these provinces since the year 1896. Similar calculations could be made with regard to the other famine-smitten provinces. It is clear that no reduction of the land revenue demand, short of its total abolition and not even its abolition itself, could enable any community to hold up its head against a calamity so vast and so appalling.

29. It is not of course disputed that if the Government were largely to abate its demand, and if the amount of such abatement were fairly distributed

**Probable Effects of an
Abatement of the Land
Revenue on the Re-
sources of the People.**

amongst the cultivating classes and were saved up by them, instead of being thoughtlessly spent, or absorbed by an increase of population, nor appropriated by a particular section, a reserve would be created that might enable those classes better to withstand the losses caused by failure of the rains. But, unfortunately, neither in the past nor in the present circumstances of the country can any warrant be found for the belief that the revenue so relinquished by Government would constitute a famine relief fund in the hands of the people. Experience has shown that excessive leniency of the kind in question reacts prejudicially upon the industry of the agricultural classes, while it encourages the transfer of the soil to money-lenders and middlemen, who swallow the profits intended for the cultivators, and reduce the latter to a condition resembling serfdom. In illustration a reference may be made to Behar, which is permanently settled at a very light revenue, estimated as equivalent to a concession of at least 80 lakhs of rupees a year to the inhabitants. These advantages, however, have been monopolised by the land-owning section of the community, while the Behar tenants remain among the most heavily rented in India; and as the experience of two famines in the last 30 years has shown, have displayed the least capacity of resistance to the shock.

30. An additional source of error lies in the conception, which is erroneous, that it is from the rent-paying or revenue-paying classes of the agricultural

**The Classes which
suffer from Famine.**

community that the sufferers in famine and the recipients of famine relief are principally drawn. An inspection of any relief works on a large scale, while it will show that the poorer sections of the tenant class are not unrepresented,

will also demonstrate that the great majority are not ryots, but labourers on the land, whom the land revenue assessment practically in no way affects.

31. It is noteworthy that the theory which has here been examined, meets with no encouragement at the hands of the latest expert body that has in-

**Theory of Connection
between Land Revenue
and Famines rejected by
Famine Commission, 1901.**

quired into the facts of the case, viz., the Famine Commission of 1901. After stating what was, in each of the provinces visited by them, the pressure of the land revenue on the soil—in figures which have already been cited—they concluded by saying that except in Bombay, where they regarded it as full, the incidence of land revenue is low in moderate years, and that it should in no way, *per se*, be the cause of indebtedness. It is unnecessary, on the present occasion, to discuss what are the secondary causes of famine—for as to the primary, there can be no dispute—and of the poverty and indebtedness which famine brings in its train. But it is manifest that any one who shuts his eyes to the industrial and economic forces that are at work in India at the present time, and that are patent upon the surface of agrarian life, who does not take into account the ever-increasing subdivision of holdings (arising from the land-hunger of the peasant population and the inveterate reluctance of the ryot to move even to the smallest distance from his natal place), the decline of industrial occupations other than agriculture, the rack-renting to which tenants are subjected by the more inconsiderate class of landlords and especially by middlemen of various degrees, the usurious rates of interest demanded by the money-lending class, the speculative expenditure upon litigation, the proneness to extravagance on festival occasions, and the numerous payments, in the form of petty bribes, among the ryots themselves, but who concentrates his entire gaze upon one aspect alone of their poverty, will carry away a most distorted impression both of the malady which he has set himself to diagnose, and of the remedies which it is in the power or is the duty of Government to apply.

[Paragraphs 32–37 of the Resolution deal with three possible causes of hardship in connection with Land Revenue assessment: 1. Large and sudden

**Three Possible
Causes of Hardship.**

enhancements of the revenue demand, 2. the exaction of a fixed demand where the value of produce fluctuates, and 3. the need of meeting local deterioration with prompt relief. In regard to the first point it is noted that a man who has, under a thirty-year settlement, been paying Rs. 1,000 as Land Revenue, representing fifty per cent. of his assets, will be greatly dissatisfied if on the occasion of the new settlement he is called on to pay Rs. 2,000 as Land Revenue, even though the larger sum represents but forty-seven per cent. of his present assets, since a man will look more to the actual increase of his obligations than he will to the arithmetical standards by which it is justified or determined. On the second point the Resolution says:—

“In theory the Government revenue represents the sum that may fairly be demanded on an average of seasons, and it is assessed in the belief that cultivators will save from the surplus of good years to meet the deficit in bad. It is manifest, however, that, in tracts where the chances of a bad harvest

are high, it must be exceedingly difficult to make allowances for crop failure in framing the assessment rates. And it is also clear that the agricultural classes have not, as a rule, yet learnt to regard a good harvest, not as an occasion for larger expenditure, but as a means of insurance against failure of crops. In truth, to a poor family a short harvest must be a severe calamity. The assessment may absorb but a small share of the gross produce of its land. But its circumstances depend on the net produce, on which the assessment is in higher proportion, and it is obvious that on inferior land a substantial deficiency in the outturn may leave no net produce whatever, so that (in the absence of savings) the assessment can only be paid by borrowing or by stinting the necessities of life. When such a deficiency is frequent, the rigid demand of the land revenue must add very materially to the hardships endured by a poor and uneducated people.

"In tracts where great variations from the average of produce are not very frequent, such a demand may be suitable enough, its simplicity and educative effect compensating for the hardship that may be felt in individual cases. But where the produce of the land is liable to great and frequent fluctuations owing to failure of irrigation or vicissitudes of season, there is reason to apprehend that a fixed assessment may ruin people before it teaches them."

In regard to the third point the Resolution says:—

"In a country of the size and diversity of India exceptions must occur to the general rule of agricultural progress, and localities are to be found where the conditions are those of actual deterioration. The Governor-General in Council has in mind not only the losses of population and of produce which are the unavoidable consequences of severe famine, but the circumstances of tract and villages which lose ground owing to such special causes as the effect of decimating epidemics of malarial fever or other conditions, whether connected or not with vicissitudes of season. For some years past the Government of India have insisted upon the importance of the early detection of cases of local deterioration, and have committed to Provincial Departments of Land Records and Agriculture the conduct of systematic inquiries to this end. But the information thus collected has not always been fully utilised, and there have been cases in which a reduction of revenue was not granted till the troubles of the people had been aggravated by their efforts to provide the full fixed demand. It is no doubt true that any alteration of the assessment is in conflict with the terms of the original contract, by which the landholder has undertaken a liability for loss in return for an expectation of profit. But in this matter the interests of the Government are identical with the interests of the people, and it is unwise to exact from impoverished persons a revenue which they really cannot pay, merely because they are under an engagement to pay it. The Governor-General in Council is convinced of the desirability of granting prompt relief in these cases, whether they involve tracts or single villages, even though such a course may involve a departure from the strict principles of settlement. The amount of revenue which the concession will cost to the State will be insignificant compared with the advantages obtained in assisting and encouraging an afflicted population."]

38. In the review of their land revenue policy which has now been brought

to a close, the Government of India claim to have established the following

Summary of Propositions established. propositions, which, for convenience sake, it may be desirable to summarise before concluding this Resolution:—

- (1) That a Permanent Settlement, whether in Bengal or elsewhere, is no protection against the incidence and consequences of famine.
- (2) That in areas where the State receives its land revenue from landlords, progressive moderation is the keynote of the policy of Government, and that the standard of 50 per cent. of the assets is one which is almost uniformly observed in practice, and is more often departed from on the side of deficiency than of excess.
- (3) That in the same areas the State has not objected, and does not hesitate, to interfere by legislation to protect the interests of the tenants against oppression at the hands of the landlords.
- (4) That in areas where the State takes the land revenue from the cultivators, the proposal to fix the assessment at one-fifth of the gross produce would result in the imposition of a greatly increased burden upon the people.
- (5) That the policy of long-term settlements is gradually being extended, the exceptions being justified by conditions of local development.
- (6) That a simplification and cheapening of the proceedings connected with new settlements, and an avoidance of the harassing invasion of an army of subordinate officials, are a part of the deliberate policy of Government.
- (7) That the principle of exempting or allowing for improvements is one of general acceptance, but may be capable of further extension.
- (8) That assessments have ceased to be made upon prospective assets.
- (9) That local taxation as a whole, though susceptible of some redistribution, is neither immoderate nor burdensome.
- (10) That over-assessment is not, as alleged, a general or widespread source of poverty and indebtedness in India, and that it cannot fairly be regarded as a contributory cause of famine.

Further advance will be made in respect of—

- (11) the progressive and graduated imposition of large enhancements;
- (12) greater elasticity in the revenue collection, facilitating its adjustment to the variations of the seasons, and the circumstances of the people;*
- (13) a more general resort to reduction of assessments in cases of local deterioration, where such reduction cannot be claimed under the terms of settlement.

39. In thus defining their policy, the Government of India would not desire to claim for the land revenue system of British India an exactitude or a

Conclusion. freedom from blemish to which it cannot pretend. Historically it owes its immediate origin to practices inherited from the most decadent period of native rule, and its form to changes made slowly.

* This matter has since been dealt with, and a set of principles have been formulated covering the suspension and remission of Land Revenue. The subject is fully discussed in a Resolution of the Government of India in the Department of Land Revenue and Agriculture, dated Calcutta, 25th March, 1905.

and not without mistakes, by men who were aliens to the country, and could only with difficulty, and by slow degrees, assimilate the requirements or enter into the feelings of the people. Where habit and precedent count for more than wisdom, there has been need for caution in reform; and logical completeness or simplicity could not be expected of a system born amid such surroundings, applied to such manifold conditions and to so heterogeneous a population, and subject, in the various stages of its development, to considerations of practical expediency rather than of abstract symmetry or scientific perfection. Indeed the one claim which the Government of India would decline to make for the land revenue system of this country is that it can properly be regarded as a science at all. In no country can land valuation be so described; and India, in spite of records, estimates, and tables, is no exception to the rule. A part of the weakness of the criticisms which have been directed against it, arises from the erroneous assumption that it can be regulated by fixed laws, or shaped by arithmetical standards. Assessments cannot be dictated by the theorist in his study; they elude dogmatic treatment, and can only be safely worked out by the Settlement Officer in the village and on the fields. While they may admit of statistical analysis, they are liable to be hampered by premature statistical definition. The true function of Government is to lay down broad and generous principles for the guidance of its officers, with becoming regard to the traditions of the province and the circumstances of the locality, and to prescribe moderation in enhancement, and sympathy in collection. Above all, it is its duty to exercise discrimination in the choice of the agents whom it employs for this most critical and responsible of tasks. The Governor-General in Council acknowledges with gratitude the services that have been rendered to the Government in this respect by a long line of devoted and capable officers, and he believes that the existing system, if pursued upon the lines that have been indicated, is both well suited to the present conditions of the country, and compatible with its future development, and that the revenue which it provides, and which is more lenient in its incidence than at any previous stage of Indian history, is capable of being levied from the people with surprisingly little hardship and without discontent.

THE LAND REVENUE SYSTEM OF BURMA.

“Under the ancient and original land system among the Burmese, as detailed in the opening portions of the eighth section of the Laws of Manu, the complete title or ‘perfect proprietary right’ was restricted either to land given to soldiers and royal servants or to grants and assignments made by the monarch in measured allotments for the support of civil officials, or else to land which had descended by hereditary succession, and had been long in the possession of the family, and was now in use for the cultivation of food grain. Such areas were called *Myéthé*, while all

Land Tenures,
Historical.

others were *Myéshin* lands having an incomplete title or 'imperfect proprietary right, liable to dispute.' These latter comprised lands received in gift, land purchased from those in whose family it was hereditary, land reclaimed from the forest, abandoned land cultivated for upwards of ten years with the knowledge and tacit consent of the owner, and land allotted to cultivators by civil officials or village headmen. In any of these cases the title held good during the lifetime of the buyer or cultivator; but the land could be redeemed by the original owner, or by his heirs, on the decease of the person temporarily in possession, or on his wishing to dispose of it.

"Theoretically and legally the Kings of Burma were not, like most of the sovereigns in ancient India, absolute lords of the soil. They received a share of the produce of the land, but to the land itself the people could originally obtain a clear title conveying absolute proprietorship, subject only to contribution for the purposes of the State, by the clearance and cultivation of forest tracts. The title to land was, therefore, essentially allodial. The Burmese agriculturists were peasant proprietors. The land was held in fee-simple, and the right and title vested in the original occupier, and his heirs and assigns, as owner. To this general allodial possession, however, there were two exceptions, although they did not apply to anything like vast extents of cultivable land. These were the Crown lands, and the lands held under the various kinds of service tenures. Apart from these two classes of lands, the Kings of Burma laid no restrictions on the cultivation of waste lands. Any person was at liberty to make a clearing in the jungle; and, on bringing this under cultivation, he became its owner. In this case there was no tenure, no holding from an overlord. Clear primitive titles of this sort could, of course, only be obtained in a country where the amount of cultivable land was far in excess of the requirements of the population. But this right of private property in land descended in Burma as unaltered, as certain, and as absolute as could be expected under any oriental despotism, and under the rule of autocratic Kings upon whose will the lives and property of their subjects were practically dependent." (Dr. John Nisbet in *Burma under British Rule—and Before*, Vol. I. pp. 268, 269.)

The following account of the Land Tenures of Burma is taken from the *Report on the Administration of Burma, 1901-1902*:—

In Lower Burma, rights over land in the rural tracts are acquired under the Land and Revenue Act, No. II. of 1876, which

gave the force of law to the customary modes of acquisition found current when the Province came under British rule. A

Present Land Tenures in Lower Burma.

permanent right of use and occupancy in land may be acquired under that Act either by a twelve years' continuous squatting occupation, combined with regular payment of the land revenue, or by a specific grant from the State. The first of these modes of acquisition is most common in tracts which are in an advanced state of cultivation, where the margin of waste land is comparatively small, and where cultivation, therefore, increases by gradual extension of existing holdings. The latter of the two modes of acquiring rights over land is commonly resorted to by new-comers in the more remote tracts. Exemption from payment of revenue for varying terms is allowed to grantees of land according to the difficulty of clearing. No restriction is placed on the right of a landholder to alienate his land, but alienations to persons who are not agriculturists are discouraged.

The normal condition of Burman agriculturists is that of a peasant proprietor, but a considerable and growing class of tenants exists in Lower Burma. This class is recruited in part from persons who have formerly been land-holders, have run into debt, and have in consequence had to part with their rights in their holdings and occupy them as tenants. Other tenants, particularly in the delta of the Irrawaddy, are immigrants from Upper Burma and young men setting up house. Although a precise estimate cannot be made of the extent to which land is being year after year transferred from its original owners to their creditors, it is certain that such transfers have for some years been frequent in the neighbourhood of large trading centres, and that the area of land cultivated by persons in the condition of tenants, who have no statutory rights and pay rent to middlemen, is on the increase. The area let to tenants is now over one-fifth of the total occupied area, and the average rent per acre of paddy-land is as high as Rs. 8. Rent is mostly paid in produce, and rebates are usually, but not invariably allowed in case of severe damage to the crops. About one-sixth of the cultivated land is held by non-agriculturists, of whom three-fifths do not live near their lands. The increase in this class has been caused by the need of capital to open out the country, and during the last decade the extension of cultivation has been rapid. The average purchase price of an acre of paddy-land is now Rs. 24 per acre. The average annual rental is thus one-third of the price of the land.

The position of tenants in Lower Burma may be summed up in the statement that there is no fixity of tenure and no limit to rents, but that the condition of tenants is on the whole prosperous. The land is rich, tenants derive an ample living from the produce after paying rent, and there is as yet no very strongly marked tendency to the formation of a permanent tenant class. Nevertheless, of late years the increase in land speculation has raised rents, and in certain tracts Settlement Officers report that rack rents are imposed. It is to create a class of protected tenants that a Tenancy Bill is now under consideration.

Rights over land in towns and villages are now regulated under the provisions of the Lower Burma Town and Village Lands Act, IV. of 1898. The rights allowed under that Act are similar to those given over agricultural land. But in the scheduled towns

of Rangoon, Moulmein, Akyab, Bassein, and Prome the acquisition of rights is governed by rules of long standing which have been continued in force. In the last three towns any person is deemed a land-holder who can prove continuous possession from some thirty to fifty years ago up to the passing of this Act. In these towns the registration of changes of title is compulsory.

The law which regulates tenures of land in Upper Burma is the Upper Burma Land and Revenue Regulation, No. III. of

Present Land
Tenures in
Upper Burma.

1889. The primary division of all lands in Upper Burma is into: (1) State land; (2) Non-State land. "State land" is described in section 23 of the Upper Burma Land and Revenue Regulation. It means land belonging to, or at the disposal of, the State, and includes the following:—

- (a) Land hitherto termed royal land; *i.e.*, lands customarily known as *Ledaw*, *Ayadaw*, *Lamaingmye* (land cultivated by Royal slaves), and other lands similarly styled up to the coming in force (13th of July, 1899) of the Land and Revenue Regulation.
- (b) Land held on condition of rendering public service or as an appanage to, or emolument of, a public office; that is to say, land held at the time of the coming in force of the Regulation (13th of July, 1889) by persons who actually or nominally rendered or were liable to render service to the King, and to whom the land had been assigned as remuneration for such actual or nominal service. This category includes land held under a variety of tenures, of which the following are the principal:—

Ahmudan-sa land, of which the produce is enjoyed by persons who had been foot-soldiers or artillery-men of the King or by the descendants of such persons; by pages of the King or their descendants; by the King's boatmen, litter-carriers, betel-carriers, and other menials or their descendants, and so forth.

Si-sa land, of which the produce is enjoyed by horse-soldiers of the King or their descendants.

Thugyi-sa land, of which the produce is enjoyed by *thugyis* (revenue collectors) or their descendants.

Wun-sa land, of which the produce is enjoyed by persons who had been *Wuns* (District Governors) in the King's time or by their descendants.

Min-mye land, assigned for life or for lives, or for a period, to members of the Royal Family.

- (c) Islands and alluvial formations in rivers; *i.e.*, lands liable to periodical change by the action of the river.
- (d) Waste land and land included within reserved or village forests, by which is meant all land which had never, up to the time of the coming in force of the Regulation, (*i.e.* up to the 13th of July 1889), been under cultivation except—
 - (i) sites and enclosures of pagodas, monasteries, other religious buildings, and schools;
 - (ii) sites and enclosures of dwelling-houses in towns and villages.
- (e) Land which had been under cultivation, but had been abandoned, and to the ownership of which no claim was preferred within two years from the coming in force of the Regulation *i.e.*, up to 13th of July, 1891.
- (f) *Athi* or *asu* lands, or village communal lands, which are periodically distributable or distributed by the officer in the village who represents the State.

In the case of land coming under heads (a), (b), and (c) the British Government has simply assumed the rights enjoyed by the Burmese Kings. In the case of land coming under heads (d) and (e) it has done more than this. The Kings of Burma were not ordinarily in a position to assert an effective claim over waste land brought under cultivation. Speaking generally, any person was at liberty to till waste land, and, on bringing it under cultivation, he acquired rights over it which in time be-

came ancestral (*bobabaing*) and heritable and resembled in other ways those of private ownership. But outright sales of lands were rare and contrary to custom, and private or exclusive proprietary rights could not be acquired over lands in the large tracts of country in which the ancient *athi*, or village communal tenures, survived. The British Government has, under the Regulation of 1889, declared itself the owner of all waste land, and no such land may be cultivated except in accordance with rules under the Regulation. These rules provide for the grant of leases of waste land for any period not exceeding thirty years and for the grant of permits to occupy such land temporarily. Cultivators wishing to take up waste land are at liberty to adopt either of these methods of acquisition. The rules, which are modelled on the rules in force in Lower Burma, provide for the levy of revenue on areas leased and occupied, and for the temporary exemption from revenue of areas which have to be cleared of forest growth, shrubs, or grass before they can yield a crop. Leases have not, however, become popular in Upper Burma, and waste land is cleared and occupied without title.

"Non-State land" has not been defined, and its incidents—other than the liability to payment of land revenue—have not been authoritatively described. It is land other than State land, and has been held to include—

- (i) *dama-u-gya* land; i.e., lands which were cleared by persons before the 13th of July, 1899, and are still in the possession of these persons;
- (ii) *bobabaing* lands; i.e., lands which were cleared before the Regulation came into force (i.e., before the 13th of July, 1889), and are now in possession of the descendants of the persons who cleared them, or of persons who obtained them for valuable consideration from those who cleared them, or from their descendants.
- (iii) lands of which the ownership had been granted by written orders of the King, or has been granted since annexation under a written instrument by, or by order of, the Local Government: such lands would be considered to be *bobabaing*.

All lands, whether State or other than State, are subject to the payment of land revenue to the Government. This land revenue is assessed at rates in kind or money which
Tenants. are fixed on classes of soil or classes of crops. The tenants of land in Upper Burma may be renting either State land from a State land occupant or non-State land. Rents and

tenancies, except in the irrigated tracts of Mandalay and Kyauksè districts, are ruled by custom, and rents may vary from one-tenth of the produce on very poor soil to one-half the produce on good paddy-land. The tenants thus usually get a rebate of rent when the crop is poor, and are usually in as favourable circumstances as the small peasant proprietor. With the exception of the *thugaungs* in Salin subdivision, of the ex-King's relations and ministers in Mandalay, Kyauksè and Sagaing, and of the old Burmese officials of the former régime, the landlords of Upper Burma do not stand out as a class on a higher social scale than the tenants. Owing to the general poverty of the cultivators, and the absence of large areas of waste for cultivation, wealthy land-owners have perhaps more authority in the village than is the case in the lower Province. It will probably be desirable to extend the protection to tenants, which will be afforded by the draft Tenancy Bill, to certain areas in Minbu and Mandalay. Elsewhere, as there is at present but little inducement to invest capital in the poorer land of Upper Burma, the proprietor of the soil usually farms the land himself.

Town lands in Upper Burma are administered under the Upper Burma Land and Revenue Regulation, No. III. of 1889, and rules for the disposal of State waste lands in Railway towns and Civil stations which were published in 1899. With very few exceptions all town lands are State lands.

The following table shows the latest recorded statistics (1902) relating to Land Tenures in Burma. The statistics of squatters, of persons who, by twelve years' continuous occupancy, have acquired the permanent right of use and occupancy of a land-holder, and of persons holding their land under deed of grant from Government are not separately recorded in Lower Burma. It may be noted, however, that in exceptional cases only does the occupier who has acquired a land-holder's title take the necessary steps to have the title duly recorded. He is ordinarily content to continue in occupation merely as a squatter. The entries under waste-land grants refer to certain special grants of large areas which were issued on favourable terms as to revenue in order to encourage the spread of cultivation. The rules under which these grants were made are now obsolete.

The figures both for the number of holdings and area are approximate only for Upper Burma, as accurate information is not available for districts or tracts which have not been brought

under supplementary survey and in which the assessment of the land is calculated on a share of the out-turn.

DESCR.	NUMBER OF HOLDINGS.	AREA OF ACRES.
<i>Lower Burma.</i>		
Squatters, land-holders, and grantees assessed at full rates	1,247,801	7,448,119
Waste-land grants, either wholly or partly revenue-free, in perpetuity	97	154,864
<i>Upper Burma</i>		
State land	269,920	1,539,235
Non-State land	890,051	977,520
Total	2,407,869	10,099,738

SURVEY AND SETTLEMENT.

The following account of the system of survey and settlement is taken from the *Report on the Administration of Burma, 1901-1902*.

The system of survey adopted in the Province is that of a connected theodolite exterior survey and a field-to-field interior survey. 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 are determined with the same accuracy. Then within these minor polygons come the *kwins*, which in Burma correspond in many ways to the *mauzas* of Northern India. These *kwins* are the smallest polygons, rarely exceeding one to one and one-half square miles in area. They are not private estates or properties, as the Indian *mauzas* are, but simply village blocks of paddy-cultivation and waste of convenient size enclosed, as frequently as may be possible, within natural boundaries, and they are dealt with just in the same way as the larger polygons. Proceeding thus from the greater to the less, the margin of possible error is being constantly narrowed. The mathematically-ascertained area of the large circuit must be found to be equal to the total of the areas

of the included smaller circuits; and, until perfect agreement is obtained by repeated check processes, neither the larger nor the smaller areas are accepted, and so on down to the very unit of survey, which is the field. The field in Burma may at present be said to be a square or rectangular area of paddy or other cultivated land included within well-marked boundaries. Its area varies from one acre in the great alluvial plains of the lower delta to one-quarter acre in the closely cultivated tracts of the Prome and Thayetmyo districts towards the apex of the delta. The aggregate of the field areas within each *kwin* must agree with the area of the *kwin* polygon, and until this agreement is attained the areas of the fields are not accepted. It will thus be seen that the method of cadastral survey is calculated to guarantee scientific accuracy in every detail.

The land records department maintain the annual survey and assessment in the cadastrally surveyed districts, including those in which no regular settlement has yet been introduced. The changes and extensions in cultivation, ownership, topography, etc., are annually depicted on fresh copies of the *kwin* maps, and the assessment register records the area of each holding, with all changes and the assessment due at the rates fixed by settlement. The annual survey is needed *inter alia* for purposes of land-revenue assessment. Considerable areas of cultivable waste are newly occupied from year to year either without title or with a permit or grant from Government, and these and other changes require to be resurveyed, as each individual holding is separately assessed annually on the area occupied and cultivated. Statistics are annually collected as to prices, sales, mortgages, crops, etc., and together with the annual crop measurement statistics furnish the Revision Settlement Officer with data for the resettlement of the acre rates, and are also an indication of the economic changes which are annually taking place. In addition the land records department furnishes evidence as to grazing grounds and fisheries and measures all *pottas*, and the inspecting staff also checks tax-tickets as a prevention against fraud on the part of the revenue collecting officials. Changes in cultivation and in fisheries and the abnormal demand for grants of land have been so pressing in recent years that it has been out of the power of the permanent staff in many *kwins* to annually effect more than an accurate assessment, and the changes of the survey have there been brought up to date, prior to revision of settlement, by special survey staffs under the direction of the inspecting and superintending officers.

The term "Settlement," or "Land Revenue Settlement," is used to indicate the various processes by which the Government determines the amount of tax to be collected on land. Owing to its more recent acquisition, Upper Burma is very far behind the Lower Province in the matter of Settlement.

With the exception of the unsurveyed districts of Salween and Northern Arakan, mostly under *taungya* cultivation, and of

**System of Settlement,
Lower Burma.**

Tavoy, Mergui, and parts of other districts surveyed under the direction of the provincial land records department, the original settlement of the cultivated land of Lower Burma was completed in the year 1901, and is now proceeding in the locally surveyed areas in the delta, where the extensions of cultivation have been most rapid. The system of settlement consists in acre rates, based on the ascertained productiveness of the chief varieties of soil and crops, the local price of the produce averaged over a term of years, and the cost of cultivation: the rates thus deduced are compared with the rents paid by tenants and modified by other circumstances, such as the standard of living, indebtedness, etc., of the agriculturist. The rates remain fixed per acre for a term of years, ordinarily fifteen, but assessments annually vary with the increase or decrease in the size of the holding. At the original settlement the area of each holding, field by field, as it exists at the time of settlement, the name of the owner or occupant, the number of years he has been in possession, and the names of the tenants and mortgagees, with the rents paid or the amount of the encumbrance, have been recorded in the settlement registers prepared in duplicate, and this evidence is supported by the sixteen-inch trace showing each field and its correct position, together with the external limits of each holding. Other topographical features, the area covered by cultivable and uncultivable waste, village sites, streams, roads, etc., are all entered, and the total area of the various plots checked and compared with the total area in the *kwin*, as described in a prior section. The revision settlement is confined mainly to a revision of the assessment; the main assessment tracts of the original settlement are usually unaltered, but the classification of soil within them and the rates per acre may require revision. The rates are fixed after a consideration of the same factors as at the original settlement, supported by crop measurements and inquiries in every *kwin* or village. As in the original settlement, the acre rates fixed at revision are maintained for a term of years, usually fifteen.

Until a few years ago it had been the custom in Burma that

the cultivator should pay only the full assessment rate on the area actually cropped. He could leave as much of his holding as he liked uncultivated, and on such uncultivated part a merely nominal rate of assessment—2 annas per acre, a sort of quit-rent—was imposed, the cultivator, by payment of this quit-rent, retaining all his rights in the land. The land so left uncultivated is called fallow. As a matter of fact, the term "fallow" is a misnomer. The land is never left in what would be known in England as open fallow. A so-called "fallow" field in Burma is a field which after the paddy upon it has been reaped is left untouched till the cultivator is inclined to plough it up again. It is never even ploughed up until its turn to yield a crop comes round. The usual reason for letting any land lie idle is that the cultivator is either unable or unwilling to cultivate it. The custom of levying a 2-anna rate on so-called fallows is still maintained, but in consequence of the growth of the value of land and of a landlord class the extent of its application has been somewhat curtailed, and wealthy or non-resident landlords are not allowed the privilege of the reduced assessment. The rule which is now in force provides that the 2-anna rate shall be levied on the whole or any part of a holding which is left uncultivated, either in order to allow the soil to recover from exhaustion, or because the owner is prevented from causes beyond his control, such as death of cattle or illness or death in his family, from cultivating it. During the past few years the 2-anna rate has been assessed in certain specified *kwins* where the soil is too poor to work every year, without the necessity of a written application to any Revenue Officer. An assessment varying at the discretion of the Deputy Commissioner from 2 annas per acre to the normal cultivation rate is levied on land which is left uncultivated for grazing purposes, or which has been generally sublet during the five preceding years, or which has been granted revenue-free for a term of years and has not been brought under cultivation within a reasonable period, or which has been a source of profit during the year of assessment.

The abatement on account of fallow is quite distinct in theory from abatements on account of remisison, although in practice the two kinds of abatements necessarily often coincide. Remissions are granted in cases where crops have been wholly or partially destroyed by floods or drought or other cause beyond the cultivator's control. If the entire or nearly the entire crop on a holding has been destroyed, the whole revenue is remitted. If partial loss of crop is suffered, the re-

mission is proportioned to the extent of the loss. No remission is, however, granted unless the loss of crops exceeds one-third of the estimated ordinary full crops of the holding.

The vital importance of Land Revenue Settlement justifies the inclusion in this Report of some detailed information in regard to the methods of work prescribed for the Settlement Officers. The *Directions to Settlement Officers*, issued by the Government of Burma (as amended to August, 1902), is printed in Appendix O.

The land revenue system of Upper Burma is still unsettled, and is the subject of much discussion. However, some conclusions which seem final have been arrived at. For instance, in 1897 it was decided that only areas under ma-

tured crops should be liable to assessment and that rates should not be assessed on either failures or fallows. This important decision is still unshaken: it makes the revenue assessments in the central dry belt very variable or elastic, but it is still in the experimental stage. Again, Regulation No. V. of 1901 eliminated the distinction between rent and revenue on State and non-State land respectively from the Upper Burma system, and made all lands liable to the payment of land revenue. At the same time this Regulation directed that the rates of land revenue payable are to be taken into consideration when fixing the average rate at which *thathameda** tax is to be levied. This latter decision is, it may be observed, a most important departure from the old system of adjustment or exemption from *thathameda*,* which had been tried and found wanting. Settlement Officers, when proposing rates of land revenue which are fixed on classes of soil or on classes of crop throughout any district or part of a district, also propose reduced rates of *thathameda*,* but the assessment of this latter tax, once its rate has been fixed on individual households within the village, is still left to the *thamadis*, or assessors. Also the Local Government, with the previous sanction of the Governor-General in Council, may direct that in any district or part of a district an abatement from the rates fixed on soil or crops shall be made before these rates are applied to the assessment of land other than State, and the amount of such abatement has usually been 25 per cent.

In Upper Burma the district is settled as a whole, and not in tracts of a varying size, as in Lower Burma. The Regular Settlement is timed to take three years in each district, but, owing to the size of the districts or to the complexity of the work, it

* For particulars as to *thathameda* see p. 607 et seq.

is seldom completed in less than four years. During this time, while conducting all the inquiries regarding agriculture and the economic position of the cultivators, the Settlement Officer measures typical crops in each *kwin* or village each year for three years. He then has to prepare a record of rights and occupation, frame proposals for the assessment of land revenue and for reduction of the rate of *thathameda*. Holdings in Upper Burma are very small, frequently confined to a single field, the holdings of one man scattered, the soils and the crops numerous, while the uncertainty of the rainfall renders it difficult to form an idea of the average productiveness of the various soils and crops. For irrigated areas special water rates have to be proposed, and special claims for exemption considered. During the settlement a land records staff is engaged in keeping the survey and registration up to date, and on the completion of the settlement this staff carries on the duty of survey and assessment.

In Upper Burma the work of the land records department in its general features is the same as that in the lower Province, but in its details is far more laborious and less technical. Owing to the system of assessment on the area under matured crop only, each field and cultivated portion of each field have to be shown for each holding in a field register. Areas on which the crop has failed, areas irrigated, and the names of all the various crops field by field have to be entered in this register. The assessments follow the various harvest seasons; and, though the winter harvest is the most important in some districts, the autumn and the hot-weather harvests are heavy, and in upland tracts the surveyor must visit the same holding twice in the year to record the matured crop area. The calculation of assessments, which are shown in a separate register, is further complicated by the different rates on soils, crops, and State and non-State land. Less accuracy in survey, with the exception of highly rated tracts, is looked for than in Lower Burma, and the survey work is generally lighter; but the actual labour of visiting the fields, of writing the details in the registers, and of calculating the assessments at a great variety of rates for each harvest, is far heavier.

Although the *thathameda* is a house-tax, the proceeds from this source are classed in the official reports under land revenue.

The *thathameda* is collected in Upper Burma only, and it will be abolished gradually, as far as the land-holding classes are concerned, in favour of a regular land tax. The following brief account of the *thathameda* is taken from Dr.

The Thathameda,
or House-tax, in
Upper Burma.

Nisbet's *Burma under British Rule—and Before*. The *thathameda* was introduced by King Mindôn into Upper Burma, and was retained by the British Government on the annexation. It still forms the principal tax there, and is assessed in much the same manner as formerly. The *thugyi*, or village headman, reports the number of houses in his village. This statement is checked by the *myothugyi*, or headman of a circle, in districts where there are such officers, or else by the *myoók*, or township magistrate, the *akunwun*, or native revenue officer of the district, and by the district officer and his subdivisional assistants. The sum due from each village having been fixed, *thamadis*, or assessors, corresponding to the village elders, determine the amount to be contributed by each householder. Special exemptions are given during years of scarcity, or whenever exceptional reasons exist for not demanding the usual full amount, while religious recluses, public officials, and all persons incapable of earning their own livelihood are exempt from any contribution. The revenue law of Upper Burma provides for the levy of *thathameda* on all classes of the population, for the assessment of rent on State land, and for the assessment of revenue from non-State land. But, as no revenue was assessed on land of the latter class by the Burmese Government, the British revenue law recognizes the fact by authorising that, when revenue is levied on such land, the owners of the same may obtain exemption from or reduction of the *thathameda*. The work of the settlement officer in Upper Burma is therefore threefold, namely: (1) to draw up a record of rights and occupation in land, (2) to propose rates for the assessment of all cultivated lands, in the form of rent for State land and revenue for non-State land;* and (3) to submit proposals for the adjustment of the *thathameda* on the non-agricultural classes and on those classes whose livelihood depends only partly on agriculture and mainly on other sources.

The assessment of rent and revenue is based upon deductions drawn from the information collected as to the productivity of the soil, the cost of cultivation, and the value of the produce. With reference to the final section of the settlement officer's duties, information is collected as to the occupations and means of livelihood of the people, with a view to determining what amount of *thathameda* can be demanded equitably from them after revenue has been assessed on non-State land. The main principles that have been laid down for his guidance are: first,

*This distinction between rent and revenue has been abolished since Dr. Nisbet's work was published.

that persons dependent solely on agriculture are to be exempted from *thathameda*; second, that persons, who, though partly dependent on agriculture, derive the substantial portion of their income from other sources, are to pay *thathameda* at a reduced rate; and, third, that persons who derive the whole of their income from other sources than agriculture are to pay the *thathameda* to the same extent as before the settlement.

To the above account I may add that new directions have recently been issued (August 12, 1905) under the Upper Burma Land and Revenue Regulation, 1899. These new directions, which are printed in the *Burma Gazette* of August 19, 1905, relate chiefly to the methods of revenue assessment and collection in Upper Burma, and contain no important modification of the general principles which are briefly summarised in the foregoing paragraphs.

MINOR SOURCES OF LAND REVENUE.

A capitation tax is payable by all males between the ages of eighteen and sixty years at such rates as the Lieutenant-Governor may from time to time direct. The capitation tax may not exceed five rupees per annum for married men or two rupees and a half for unmarried men. There are, however, a number of exemptions from liability to pay capitation tax. Amongst these may be noted village headmen, honorary magistrates, ministers, priests, and teachers of religion, schoolmasters, and persons liable to the payment of income tax or to the payment of land rate in lieu of capitation tax. A return of exemptees is published each year in the Report on Land Revenue Administration.

In certain towns there is levied instead of the capitation tax an annual rate upon land. This rate may not exceed (1) on land covered with buildings one pie and a half* per square foot, (2) on land not covered with buildings three rupees per acre. The towns in which this land rate is levied are determined by the Lieutenant-Governor, and the boundaries of such towns, for the purposes of the land rate, may be so fixed as to include any suburb. The land rate is levied in addition to any ordinary land revenue which may be payable on the land concerned.

Under the head Miscellaneous Land Revenue there are in-

* There are 192 pies in a rupee. The pie, therefore, is equal to one-sixth of a British halfpenny or one-sixth of an American cent.

cluded in Lower Burma receipts under the Lower Burma Village Act, 1889, royalties and fees on minerals, survey fees, and one or two other small heads. Miscellaneous Land Revenue. Miscellaneous Land Revenue in Upper Burma includes royalty on petroleum, receipts from the Ruby Mines, water rate in respect of irrigation works, receipts under the Upper Burma Village Regulation, 1887, and one or two minor heads.

In conformity with the ancient custom of the country all fishing rights belong to the Government, and a considerable public revenue is derived from the leasing of fisheries and from the grant of licenses for the use of nets, traps, and other fishing implements.

The usual mode of procedure in regard to the disposal of fishery rights is to offer the lease of each fishery at public auction. The person offering the highest annual rent secures the fishery. In regard to fisheries which have not been declared open to the public, and have not been leased to some particular person, the right to fish therein may be obtained by securing a license for the use of certain specified fishing implements. The cost of the license varies with the nature of the implement to be employed, and ranges from five rupees per annum for a small casting net to sixty rupees per annum for each boat using *damins*, which are bamboo traps of funnel shape.

STATISTICS OF LAND REVENUE.

The following table shows the details of the Land Revenue of Burma during 1903-04 and 1904-05. Further statistics are given in Appendix M.

DETAILS OF THE LAND REVENUE.

(IN RUPEES.)

HEAD OF REVENUE.	1903-04.	1904-05.
Ordinary Land Revenue	21,508,694	22,982,704
Water Rate, Upper Burma	24,423	31,665
Capitation Tax	4,868,214	4,984,819
Land Rate	87,722	92,024
Thathameda	4,611,328	4,863,120
Fishery Revenue	2,847,117	2,910,674
Miscellaneous Revenue	1,908,152	2,453,949
Total	35,855,650	38,318,955

The figures represent the amount collected on account of the current year, collections on account of previous years being excluded. These figures also exclude excess collections. There is, therefore, a discrepancy between these figures and those shown against Land Revenue in Table II. of Appendix M, which include all collections, but which represent the actual Land Revenue after various minor adjustments have been made.

The following table shows the details under the head Miscellaneous Revenue in the foregoing table:—

DETAILS OF MISCELLANEOUS LAND REVENUE.

(IN RUPEES.)

HEAD OF REVENUE.	1903-04.	1904-05.
Rent of Town Lands not credited to Local Funds,	66,191	77,420
Fees, Rents, and Royalties on Petroleum, Rubies,		
Jade, Amber	1,409,324	2,002,521
Fees, Rents, and Royalties on Other Minerals . . .	39,815	47,583
Receipts under Lower Burma Village Act and Up-		
per Burma Village Regulation *	183,820	235,156
Survey Fees for Pottas †	105,749	46,804
Other Miscellaneous Revenue	43,253	44,465
Total	1,908,152	2,453,949

Statistics in regard to Land Revenue under the various heads; of Revenue proceedings against defaulters; of sales, mortgages, and redemptions of land; of the classification of the occupiers of land; and of Government loans to agriculturists, are given in Appendix P of this volume.

AGRICULTURAL LOANS.

The subject of loans to agriculturists is one very closely associated with Land Revenue; and the following brief account of agricultural loans in Burma shows what has been done to afford borrowing facilities to members of that class of the population from which Land Revenue is chiefly drawn.

* Fines upon villages for offences against the Act or the Regulation.

† Pottas are grants or loans of waste land.

The Government of Burma is empowered under two Acts of the Governor-General of India in Council to advance money to agriculturists. The first of these is

The Land Improvement Loans Act, 1883.

the Land Improvement Loans Act of 1883. This Act sanctions the grant-

ing of loans by the Government for the purpose of making improvements in land. The term "improvement" means any work which adds to the letting value of land and includes the following: (a) the construction of wells, tanks, and other works, for the storage, supply, or distribution of water for the purposes of agriculture, or for the use of men and cattle employed in agriculture; (b) the preparation of land for irrigation; (c) the drainage, reclamation from rivers or other waters, or protection from floods, or from erosion or other damage by water, of land used for agricultural purposes, or waste land which is culturable; (d) the reclamation, clearance, enclosure, or permanent improvement of land for agricultural purposes; (e) the renewal or reconstruction of any of the foregoing works, or alterations therein or additions thereto; and (f) such other works as the Local Government, with the previous sanction of the Governor-General in Council,* may, from time to time, by notification in the local official *Gazette*, declare to be improvements for the purposes of this Act.

The Local Government has made rules under this Act. Under these rules, loans not exceeding Rs. 500 in each case may be granted by the Deputy Commissioner. If the loan exceeds Rs. 500, the sanction of the Commissioner, and, if it exceeds Rs. 2,000, that of the Financial Commissioner, is necessary. The rate of interest charged is $6\frac{1}{4}$ per cent. per annum, and the security may be either the land itself, other property, or the personal security of at least two landholders other than the applicant. The Government is empowered to grant loans without interest or at a lower rate of interest than that prescribed in the rules.

The Agriculturists' Loans Act of 1884 empowers the Local Government to grant loans to owners and occupiers of arable

The Agriculturists' Loans Act, 1884.

land, for the relief of distress, the purchase of seed or cattle, or any other purpose not specified in the Land Improvement Loans Act of 1883, but connected with agricultural objects. The Local Government has made rules under this Act. Under these rules a loan may be made to an agriculturist

* On Aug. 10, 1906 a Bill was introduced in the Council of the Governor-General of India which, amongst other things, removes this condition of sanction.

if he has, from causes beyond his control, such as unfavourable weather, floods, droughts, cattle disease, accidents by fire or water, or any other similar circumstances, lost or been deprived of the benefit in whole or in a large portion of his crops, fruit-trees, dwelling-houses, cattle, or farming implements, or any other property primarily necessary for the occupation of an agriculturist; or if he has not sufficient money to enable him to make the necessary outlay for the purchase of seed, cattle, or implements of farming, or for the construction of dwelling-houses or other buildings, or for such other purposes as do not come within the scope of the Land Improvement Loans Act of 1883. Up to Rs. 300 the loan may be granted by the Deputy Commissioner; the Commissioner may make a loan not exceeding Rs. 500; and loans above this sum must be authorized by the Financial Commissioner. The rate of interest is fixed at 5 per cent. per annum, with the reservation that loans may be granted free of interest or at a lower rate than 5 per cent. The security for these loans must be such as the Deputy Commissioner deems sufficient. The joint security of the applicant and the *thugyi* of his village, together with a mortgage upon some immovable property is usually required.

The following table shows the amount advanced under these Acts during the year ending 31 March, 1905. Further details

Amount of Loans under the Acts. will be found in Appendix P. Prior to 1905 no distinction was made in the statistics appended to the Land Revenue Report between loans granted under the Land Improvement Loans Act and those granted under the Agriculturists' Loans Act. In the Report for 1905 it is stated that in that year only Rs. 2,300 were advanced under the former Act; and, as the amount recovered during the year on account of previous advances under Land Improvement Loans Act was only Rs. 200, it may be conjectured that advances under that Act have hitherto formed a very small proportion of the total agricultural advances.

AGRICULTURAL ADVANCES DURING 1905.

		Rupess.
Principal.	Opening balance outstanding	351,642
	Advanced during the year	454,285
	Recovered during the year	413,677
	Closing balance outstanding	395,250
	Balance overdue	84,710
Interest.	Total recoverable during the year	33,566
	Recovered during the year	31,780
	Balance overdue	4,506

CO-OPERATIVE CREDIT SOCIETIES.

Notwithstanding the facilities for borrowing offered by the rules under the two Acts referred to in the preceding section, it is found

Loans by Government and Native Money-lenders. that large numbers of agriculturists and others still prefer to get their loans from the native money-lenders, known locally as "chetty."

The rate of interest charged by the chetty is very much higher than that charged by the Government, but to the native mind this consideration does not appear to weigh against the advantage of getting a loan quickly, in which particular the chetty offers the borrower much better service than the Government. A further point in which the chetty appeals to the native is in the elasticity of his arrangements for repayment. Here, again, it is not the amount of money paid for the accommodation, but the convenience of a loose system of collection, which determines the action of the borrower.

With these and other facts in view the Government of India passed in 1904 a Bill to provide for the constitution and control

The Co-operative Credit Societies Act, 1904. of Co-operative Credit Societies. The only reference to this Act which I have been able to find in the Reports

of the Government of Burma is a sentence in the Resolution on the Land Revenue Administration, which says, "An auspicious commencement was made with the system of Co-operative Credit Societies, by which it is hoped that the people will eventually by their own effort become independent of the native money-lender." The question of providing ready means of borrowing money at reasonable rates of interest is one of the greatest importance in all tropical countries chiefly dependent on the industry of persons of very small capital; and an abstract of the Resolution of the Government of India on the subject may be inserted with advantage in this Report.

ABSTRACT OF A RESOLUTION OF THE GOVERNMENT OF INDIA ON THE SUBJECT OF CO-OPERATIVE CREDIT SOCIETIES.

The Resolution is dated the 29th of April, 1904, and is issued from the Department of Revenue and Agriculture. The following abstract reproduces the sections of the Resolution which deal with the general provisions of the Co-operative Credit Societies Act and the views of the Government of India thereon.

One of the most difficult problems with which the small agriculturist is everywhere confronted is to obtain the money which is necessary for his operations at a reasonable rate of interest. This is a state of affairs by no means peculiar to India. The petty agriculturist of Europe is for the most part financed by borrowed capital, and there, too, the money-lender takes advantage of the exigencies of the cultivator to demand exorbitant terms. In India, however, the problem is aggravated by the fact that Indian rates of interest are to some extent survivals from times when the security which the agriculturist had to offer was of far smaller value than at present, and also by the fact that the money-lender has not been slow to take advantage of the unwillingness of the civil courts to go behind the terms of a written bond. The desirability of providing the peasant with some means of obtaining the capital required for agricultural operations otherwise than at usurious rates of interest has at various times engaged the attention of the Government of India and of all who are interested in promoting the welfare of the agricultural classes.

At the outset it is important to remember that the question of agricultural banks is quite a different matter from that of co-

Agricultural Banks and Credit Societies.

operative credit societies, and that it is the latter only which are now being dealt with. The object of agricultural

banks is to provide capital to finance the general agriculture of the country; their operations are of the ordinary banking nature, and on a considerable scale; and whatever special privileges it might be found possible to extend to them, the ordinary Companies' law of India would still continue to apply to them. The object of the societies contemplated by this Act is far more special and limited. It is, in the words of Sir Frederick Nicholson, to substitute for a number of individual credits, which are weak because they are isolated, a combined credit, which is strong because it is united. Their operations are confined within the limits of the society, and they will be "small and simple credit societies for small and simple folk with simple needs and requiring small sums only."

In considering the question, it soon became apparent that no real advance was possible without legislation. The Companies

Special Legislation Necessary. Act at present in force (Act VI. of 1882) contains 256 sections, and its elaborate provisions, however necessary in the case of combinations of capital on a large scale, are wholly unsuited to societies of the kind it is now desired to encourage. The first

thing to be done, therefore, was to take such societies out of the operation of the general law on the subject, and to substitute provisions specially adapted to their constitutions and objects. In the second place, it was desirable to confer upon them special privileges and facilities, in order to encourage their formation and assist their operations. And, thirdly, since they were to enjoy exemption from the general law and facilities of a special nature, it was necessary to take such precautions as might be needed in order to prevent speculators and capitalists from availing themselves, under colourable pretexts, of privileges which were not intended for them.

There were two cardinal objects which the Government of India kept in view in framing the present Act. The first is simplicity. The second is elasticity. The aim has been to lay down merely the general outlines, and to leave the details to be filled in gradually, on lines which the experience of failure or success and the natural development of the institutions may indicate as best suited to each part of the country. So far, therefore, as it deals with the constitution of the societies, the provisions of the Act have been confined to those general principles which all co-operative credit societies must accept as the condition of being permitted to enjoy the advantages afforded by special legislation. There are other matters in respect of which some guidance and some restriction will be necessary; and they have been left to be dealt with by Local Governments in accordance with local needs, in the exercise of the rule-making power which the Act confers upon them. But the Government of India desire to impress upon all Governments that simplicity and elasticity are as essential in the rules framed under the law as they are in the law itself, and that especially in the first instance, and until further experience has been gained, the regulative interference of Government should be limited strictly to essentials, so as to leave spontaneous growth unhampered. Experiment is as necessary within the Province as it is within the Empire.

The present legislation is especially designed to assist agricultural credit, which presents a far more important and more difficult problem than does industrial credit; though it is recognised that societies may properly be started in towns also by non-agriculturists, and it is even possible that in some places the establishment of town banks may usefully precede and even assist the starting of purely agricultural societies. If in any town the people start a society on a co-operative basis of their own accord,

Simplicity and
Elasticity Desirable.

Objects of Present
Legislation.

it will be possible to encourage and help them, and to give them the benefit of official advice. But, in the opinion of the Government of India, it should be left to them to move in such cases; and local officers should be instructed that rural societies are to be their first care. The agricultural problem is more serious and far more difficult to deal with than the industrial problem, and it is necessary that effort should be concentrated.

It is proposed to allow urban societies free choice in the matter of liability; for rural societies unlimited liability has been pre-

Unlimited Liability. scribed as being most suitable as a general rule, seeing that the real co-operation which it is desired to encourage is the utilisation of the combined credit for the benefit of the individual members. But cases are conceivable in which it may be desirable to allow a limitation of liability to members of particular rural societies; if, for instance, a local magnate, whose sympathy and assistance it is important to secure, desires to become a member, but does not care to assume a liability which is wholly without limit. In such cases the system of guarantees, the liability of each member being limited to the amount of his guarantee, may be usefully adopted. The Act therefore gives the Local Government power, by special order, to relax the rule of unlimited liability.

Under the Bill as originally framed, rural societies were to be limited to agriculturists—a term which it was explained was not

Membership Open to All. meant to include the wealthy rent receiver—while urban societies were to consist of only men of small means. To these provisions it was objected that they excluded the very men whose aid was most important to the new societies. The provisions had been framed upon the supposition that the men of light and leading, and, still more important perhaps, the men of substance, the necessity for whose aid and sympathy was fully recognised, would assist the societies from outside, since they would have nothing to gain by membership, as they would not desire to borrow. But the body of opinion in favour of a wider basis of membership, not only in order to extend the scope of these societies as widely as possible, but also to secure that diversity of needs and interests which is desirable if their funds are to be utilised to the best advantage, was very weighty; and all restrictions upon the class of persons who may be members have therefore been removed, save in so far as is necessary to preserve the two distinct types of rural and urban societies, the former of which will consist in the main of agriculturists, and the latter in the main of non-agriculturists. Local Governments should remember, however,

that the object of the Act is mainly to assist small people; and should take precautions against its provisions being made use of by persons for whom they were not intended. The very wide discretion which the Act confers upon the Registrar is ample to secure this end.

Another condition which was imposed by the original Bill was, that members must be residents of the same town or neighbourhood. All the officers con-

The Question of Residence. sulted who speak with any authority have insisted upon the cardinal importance of this condition, as insuring that mutual knowledge and confidence which must be the basis of all successful co-operation; and it has been retained in a slightly generalised form. But it has been pointed out that there are communities among whose members a common organisation or common interests supply the place of propinquity of residence, and insure the desired conditions. A compact and closely organised tribe or caste, a community such as is formed by the Native Christians attached to a particular mission, or even the employees on a given line of railway, are instances in point. The Act, therefore, empowers the Registrar to dispense with the residence test where he is satisfied that this may be safely done, if the society is to be confined to the members of a single tribe or class or caste.

As regards new members, the original Bill provided that members admitted to a society should be "elected by the members for the time being." It was pointed

The Election of Members. out that it would often be sufficient if they were elected by the Committee; and it has accordingly been provided that they shall be "admitted by the society in accordance with the provisions of this Act and with the by-laws of the society." But the selection must still be personal, and made by the society; no person can claim admission under any automatic rule; and the important principle that the new member must be accepted by the old ones or their representatives is still maintained.

The Government of India attach much importance to the appointment of a special officer in each Province to guide and control the societies, especially in the

Government Guidance and Control.

early days of the movement; and it has been provided that each Local Government may appoint a Registrar, who should be selected for his special qualifications, and should, for the first few years at least, be constantly visiting the societies and watching their progress, rather as a friendly adviser than as an inspecting offi-

cer. By studying developments under various conditions, he will gain experience which will render him an invaluable adviser; he will know what has succeeded here and what has failed there; he will be in a position to avoid the repetition of mistakes, to point out defects and their remedies, and to extend to one part of the country methods which have proved successful in another. Upon the selection of this officer the success of the experiment will very largely depend. Gradually, as experience is gained and the societies are able to stand alone, the fostering care of the Registrar will be less required until his duties will become purely official.

Section 10 of the Act provides that loans should be admissible to members only, and the Government of India considers that

Loans to be made to Members only. this is a most essential restriction. The only exception allowed is in the case of societies lending with the approval of the

Registrar to rural societies. It is desired to encourage thrift, and the most efficacious encouragement to the accumulation of savings is to insist that no advances shall be made except to those who have become members and have made a payment to the funds of the society.

The original Bill included certain provisions regarding loans on the security of agricultural produce which were very generally misunderstood. It was never intended to allow of advances against

Agricultural Produce as Security. standing crops, than which no form of security would be more unsuitable for these societies. But there

are some of the existing societies, and there doubtless will be many more in the future, which never handle money, their whole transactions being conducted in grain. And the object of the provisions in question was to secure that agricultural produce should stand on precisely the same footing as money for all purposes of subscriptions, deposits, advances, payments, and recoveries. Upon further consideration of the question, it was decided that such transactions were within the ordinary powers of the societies, and that no special reference to the subject was needed in the Act.

No provisions of the original Bill were more severely criticised by some, or more stoutly supported by others, than those which

Jewellery as Security. related to loans upon the security of jewellery and upon the mortgage of land.

It had been proposed to prohibit rural societies from advancing money against jewels, on the ground that the basis upon which these societies should work was no material security, but the

credit which arose from the individual character and substance of their members. It was pointed out in reply that, while personal credit was undoubtedly the basis of their transactions, such things as jewels might properly be received as collateral security, that the custom of the country is to regard jewellery as available for this purpose, and that if a member is debarred from utilising his material credit to the full in borrowing from his society, there will be a danger of his using it to borrow from the money-lender. After full consideration of the question it was decided that while there are practical difficulties in connection with the custody and valuation of jewellery which might be formidable in the case of some village societies, it would be well to make distinctions. When a rural society is located in a town or large village, with silversmiths available, with a ready market at hand, and with members and officers of intelligence, it may safely be trusted to conduct transactions which might be dangerous in the case of a more strictly rustic association. Power has therefore been given to the Registrar to allow any society which he thinks can safely be trusted, to advance money upon jewellery; and he will be able to feel his way in the matter.

The question of mortgage was still more difficult. Almost all the considerations upon either side which have been referred to

in the preceding paragraph apply here
 Mortgages as Security. also with the addition of others of still greater importance. On the one hand, one of the methods in which an involved cultivator can most effectively be assisted is by enabling him to substitute a mortgage upon reasonable for one upon exorbitant terms; and a member who is refused the credit to which his property in land fairly entitles him, merely because he is not allowed to hypothecate it to the society, may be driven to the money-lender for a loan which, had it not been for the prohibition, he might have taken from the society with advantage to both parties. On the other hand, it is exceedingly inadvisable that these societies should be allowed to lock up their limited capital in a form in which it is not readily available; their most useful form of business will probably be small loans for short periods with prompt recoveries; and it is above all things desirable that they should keep out of the law courts. The final conclusion was that loans upon mortgage should be allowed in the first instance; but that the Local Government should have power to prohibit or restrict them, either generally or in any particular case, if it is found that interference is necessary. The matter is one which should be very carefully watched.

The provisions of sections 12 and 13 of the Act, to the effect that the number and value of shares to be held in a co-operative society by a single individual shall be strictly limited, and that shares shall not be transferable until they have been in the possession of the holder for a fixed period, are of great importance. Their object is to render impossible the acquisition by individuals of a predominant interest in such societies, to prevent speculation in connection with them, and to discourage those who might desire for reasons of personal profit to avail themselves of the facilities given by the Act to start banks for other ends than those for which these societies are intended.

It has been considered advisable that an official audit should be compulsory in all cases, and this is provided for in section 21.

Official Audit. There is no doubt that such an audit will give the outside public and the members more confidence in the management; and even where no financial assistance may be received from Government, the societies will obtain valuable privileges under the Act, and it is reasonable that they should at the same time be obliged to submit their accounts to some check, which must in this country take the form of an official audit.

Of the matters that are left to be dealt with by executive order, the most important has reference to the grant of financial assistance by Government to the societies. The

Financial Aid by Government. Government of India recognise that there is a danger of obscuring the co-operative principle by lending them State funds, and that no societies wholly or mainly financed by Government can ever attain the objects in view. But such advances will have a value beyond their mere use as capital, since they will be an earnest of the reality of the interest taken by Government in the movement, and will, under the conditions to which it is intended to subject them, stimulate the thrift and self-help which should be a condition precedent to their grant; and they doubt whether any substantial progress will be made by rural societies in many parts of the country unless such assistance is given. They therefore sanction advances to such societies to be made in even fifties of rupees, which will be free of interest during the first three years after the registration of any society. But no advance should be made to any society so as to cause the total amount advanced to and due by it to exceed the total amount of money subscribed and deposited or of share capital paid up by the members, or to exceed Rs. 2,000.

Such is the general character of the action which commends itself to the Government of India. They recognise that it is

The People to be educated to the System.

essential to start cautiously and to progress gradually. The whole matter is one in which we have to feel our way and to purchase our experience; and if action on a large scale were attempted in the first instance, it is possible that many failures might result which would fatally discredit the principle; while, on the other hand, a very few really successful instances will encourage imitation, and set an example which will quickly spread. While State help and support will be needed to begin with, the object to be kept in view is to teach the people to help themselves, and we shall not have succeeded unless we are eventually able to withdraw that support. The Government of India have already insisted upon the absolute necessity for simplicity, if the system is to take root among the peasantry; they desire further to lay stress on the necessity of reducing restrictions to a minimum, so that the people may be encouraged (subject to certain necessary safeguards) to work out the problem on their own lines, with such guidance and advice as can be given them.

CHAPTER XIV.

FOREST ADMINISTRATION

REFERENCES.

- Nisbet, John. *Burma under British Rule—and Before*. Westminster, Constable, 1901, 2 vols., pp. 460 and 452.
- Brandis, Sir Dietrich. *Reports on the Teak Forests in Pegu and the Tenasserim and Martaban Provinces; to which is added Correspondence regarding the Opening of the Pegu Forests to Private Enterprise*. Calcutta, Public Works Dept. Press, 1862, pp. iv + 45 + 24 + lxii.
- Mason, Rev. Francis. *The Natural Productions of Burmah, or Notes on the Fauna, Flora, and Minerals of the Tenasserim Provinces, and the Burman Empire*. Maulmain, American Mission Press, 1850, 2 vols., pp. 1-332 and 333-712.
- Spearman, Horace Ralph. *The British Burma Gazetteer*. Rangoon, Govt. Press, 1879-80, 2 vols., pp. x + ii + 716 + xxxv and 859 + xviii.
- The Quarterly Civil List for Burma*. No. CXXXIX. Corrected up to the 1st of October, 1905. Rangoon, Supt. Govt. Printing, pp. viii + 372 + xxxi.
- The Forest Department Code*, 5th edition. Calcutta, Supt. Govt. Printing, 1899, pp. xvii + 213.
- Appendix to the Forest Department Code*, 4th edition. Calcutta, Supt. Govt. Printing, 1897, pp. 124.
- The Annual Reports on Forest Administration in Burma*. 1893-94 to 1904-05.

FOREST POLICY.

The Forestry Department of Burma is part of the general Forest Service of the Government of India; and the official head of the Department is the Inspector-General of Forests to the Indian Government.

The forests of Burma are administered in conformity with the general forest policy of the Government of India; and, as the question of forest administration is one of the most important with which the Government of Burma has to deal, I give here a summary of the forest policy of the Government of India as laid down in the Appendices to the Forest Department Code, fourth edition, 1897.

The sole object with which State forests are administered is the public benefit. In some cases the public to be benefited are the whole body of tax-payers, in others the people of the tract within which the forest is situated; but in almost all cases the constitution and preservation of a forest involve, in a greater

or less degree, the regulation of rights and the restriction of privileges of user in the forest area which have previously been enjoyed by the inhabitants of its immediate neighbourhood. This regulation and restriction are justified only when the advantage to be gained by the public is great; and the cardinal principle to be observed is that the rights and privileges of individuals must be limited, otherwise than for their own benefit, only in such degree as is absolutely necessary to secure that advantage.

The forests of India, being State property, may be broadly classed under the following heads:—

A. Forests the preservation of which is essential on climatic or physical grounds. B. Forests which afford a supply of valuable timbers for commercial purposes. C. Minor forests. D. Pasture lands.

The first class of forests are generally situated on hill slopes, where the preservation of such vegetation as exists, or the encouragement of further growth, is essential to the protection of the cultivated plains that lie below them from the devastating action of hill torrents. Here the interests to be protected are important beyond all comparison with the interests it may be necessary to restrict; and so long as there is reasonable hope of the restriction being effectual the lesser interests must not be allowed to stand in the way.

The second class of forests include the great tracts from which the supply of the more valuable timbers is obtained. They are for the most part essentially forest tracts, and encumbered by very limited rights of user; and, when this is the case, they are managed mainly on commercial lines as valuable properties of, and sources of revenue to, the State. The needs of communities dwelling on the margin of such forest tracts consist mainly in small timber for building, wood for fuel, leaves for manure and for fodder, thorns for fencing, grass and grazing for their cattle, and edible forest products for their own consumption. Every reasonable facility is afforded to the people concerned for the full and easy satisfaction of these needs, if not free of charge, then at low and not at competitive rates. In such cases it is distinctly understood that considerations of forest income are to be subordinated to that satisfaction.

As the pressure of the population upon the soil is one of the greatest difficulties that India has to face, that application of the soil must generally be preferred which will support the largest numbers in proportion to the area. Accordingly, wherever an effective demand for culturable land exists and can only be supplied from forest areas, the land is ordinarily relinquished with-

out hesitation. Nothing in the Forest Act or in the rules framed thereunder restricts the discretion of the Local Governments in diverting forest land to agricultural purposes, even though that land may have been declared reserved forest under the Act.

The third class of forests includes those tracts which, though true forests, produce only the inferior sorts of timber or the smaller growths of the better sorts. In some cases the supply of fuel for manufactures, railways, and like purposes, is of such importance that these forests fall more properly under the second class, and are mainly managed as commercial undertakings. But, as a rule, these forests of the third class are chiefly useful as supplying the fuel, fodder, or grazing for local consumption; and they are managed mainly in the interests of the population of the tract which supplies its forest requirements from this source. The first object aimed at is to preserve the wood and grass from destruction: the second object is to supply the produce of the forests to the greatest advantage and convenience of the people. To these two objects all considerations of revenue are ordinarily subordinated.

The fourth class of forests is composed of pastures and grazing grounds proper, which are usually forests only in name. It is often convenient, however, to declare them forests under the Act, in order to obtain a statutory settlement of the rights which the State, on the one hand, and private individuals or communities, on the other, possess over them. But it by no means follows as a matter of course that these lands should be subjected to any strict system of conservation, or that they should be placed under the management of the Forest Department. The question of agency is purely one of economy and expediency; and the Government of India believe that in some cases where these lands are managed by the Forest Department the expenditures on establishment exceed the revenue that is, or at any rate the revenue that ought to be, realised from them.

HISTORY OF FOREST ADMINISTRATION IN BURMA.

The following historical account of Forest Administration in Burma is taken, by the kind permission of the author, from John Nisbet's *Burma under British Rule—and Before*. Dr. Nisbet was for many years a Conservator of Forests in Burma.

Immediately after the annexation of Tenasserim in 1826 Dr. Wallich, the Government botanist, was sent down from Calcutta to inspect the teak forests that had thus been acquired. On receipt of his report Government resolved to reserve them as

State property, and to work the forests on the Attaran River by direct agency. The first attempts at this proved discouraging. The timber had to be sent to Calcutta for sale; and the prices realised were so bad that Government abandoned the scheme of direct extraction, and in 1829 threw the forests open to private enterprise.

Teak had, however, always been one of the royal monopolies in Burmese times, and the Government of India had no intention of foregoing the rights inherited from the King of Burma. So the new system adopted was to issue licenses restricting to four feet the minimum girth of trees to be felled, and requiring payment of a royalty of 15 per cent. *ad valorem* on all teak extracted. Four years later it was found necessary to entertain a small native establishment in connection with forest protection; but it was not until 1841 that any officer was formally placed in charge of the forests. New forest rules were then issued, and the new leases granted under these provided that no tree was to be killed if less than six feet in girth, and that five young trees were to be planted for each tree killed.

On the annexation of Pegu, in 1852, immediate steps were taken for the protection of the forests; and the office of Superintendent of the Pegu Forests was created. To this post Dr. (now Sir) Dietrich Brandis was appointed in 1856. During the six years of his tenure he substantially laid the foundations of the Forest Department of Burma. In 1863 Dr. Brandis was appointed Inspector-General of Forests in India,—a post which he held with distinguished success for twenty years; and he was thus enabled to carry out the forest policy which he had inaugurated in Burma.

In the autumn of 1856 new rules were published for bringing the Pegu forests under regular conservancy and for preventing their destruction through the improper removal of mature trees; and a rough working plan was framed for regulating the killing and felling of teak-trees for extraction. The policy adopted by Dr. Brandis was to retain full control over forest operations by means of a body of Burmese Government contractors, to extract the timber on Government account, and to sell it by public auction at a central timber depot in Rangoon.

The results of investigations made in 1856 seemed to show that a teak-tree could not be considered mature and marketable till it attained a girth of six feet near its base; and this was adopted as the minimum size of a first-class tree, those between four and a half and six feet being classed as second-class trees.

The rough working plan of 1856 was framed on the assumption

that 585,000 first-class trees were available for extraction during the next twenty-four years, and it was arranged that during the six years 1856-62 one-fourth of these should be killed by ringing. For the selection of the trees to be killed instructions were given to the "girdling" officers that not more than one in four of the first-class trees should be killed, that isolated trees should be spared for seed production, and that over-mature trees and such as overshadowed groups of young teak should be girdled in preference to others.

The work of forest conservancy was strongly opposed by the European merchants of Burma, who objected to any restraint being placed on their timber operations; and so strong did this opposition become that in 1861 the Government of India, which found itself in financial straits owing to the cost of suppressing the Indian Mutiny, threw open portions of the Burma forests to private enterprise.

In 1865 a new Forest Act was passed, and, as the Government had already become aware of the risks and disadvantages attending its action of 1861, new and definite rules were issued under the Act, amongst the most important of which was an absolute prohibition of any killing of teak-trees except by Government forest officers.

Until 1873 protection extended only to teak-trees; but in that year thitka (*Pentace Burmanica*) and thitkado (*Cedrela Toona*), woods like mahogany in appearance and texture, were declared to be reserved trees. As both of these were found useful for furniture and tea-boxes, large quantities were extracted for home consumption as furniture and for export to Calcutta for tea-boxes. By reservation and levying royalty on these two trees the Government not only obtained revenue to which it was legitimately entitled, but also caused timber consumers to turn their attention to the many other useful kinds of timber as yet unreserved, since these could be extracted for home consumption or for export without being subjected to any revenue payment.

With the increase of population under good government and the consequent growth of trade and prosperity throughout British Burma the extraction of unreserved woods soon assumed a proportion which justified the Government in reserving twelve additional species of trees in 1876. At the same time the boundaries were extended within which the forest rules applied, a new procedure was provided for making reserves or state forests, and regulations were issued for the granting of permits to extract reserved kinds of timber.

In 1870 the Government of India had become convinced that the maintenance of the future supply of teak timber could only be secured by the formation of plantations. They therefore laid down that the principal work of the Forest Department should consist in the selection of the best areas to be formed into State reserved forests, and in the formation of teak plantations.

The idea had long been entertained of trying to induce the Karen hill tribes to plant teak along with the rice raised in their hill clearings, thus utilising as a means of propagating teak the wasteful *taungya*, or hill-garden, system of cultivation which shifts annually from place to place according to the decision of the tribal oracle. Gradually the Karens took to the business, and they are now so eager to earn the additions to their income secured by the planting of teak that the difficulty is to find within the fire-protected portions of the State reserved forests areas which do not already contain more or less *taungya* teak.

During the past twenty-five years the forest administration of Burma has been the subject of a good deal of legislation. In 1881 the Burma Forest Act was passed. This was amended in 1890 by Act V. of that year, and again by Act XII. of 1891; and finally in 1902 the Burma Forest Act—an Act to consolidate and amend the law relating to forests, forest produce, and the duty leviable on timber in Burma—embodies the legislation now in force in the Province.

The following abstract serves to show the salient points of forest policy and administration in Burma:—

ABSTRACT OF THE BURMA FOREST ACT, 1902.

CHAPTER I.

PRELIMINARY.

1. (1) This Act may be called the Burma Forest Act, 1902;
- (2) It extends to the whole of Burma, including the Shan States: Provided that the Local Government may, by notification, exempt any place from its operation; and
- (3) It shall come into force at once.

[Section 2 relates to repeals effected by this Act.]

3. In this Act, unless there is anything repugnant in the subject or context,—

(1) "cattle" includes also elephants, buffaloes, horses, mares, geldings, ponies, colts, fillies, mules, asses, pigs, rams, ewes, sheep, lambs, goats, and kids;

- (2) "classification mark" means a mark placed on timber to denote its origin or the agency by which it has been handled;
- (3) "Deputy Commissioner" includes a Superintendent of the Shan States;
- (4) "Forest offence" means an offence punishable under this Act;
- (5) "Forest-officer" means any person appointed by or under the orders of the Government to be a Conservator, Deputy Conservator, Extra Deputy Conservator, Assistant Conservator, Extra Assistant Conservator, Forest-ranger, Deputy Forest-ranger, forester or forest-guard, or to discharge any function of a Forest-officer under this Act;
- (6) "forest produce" includes:—
- (a) the following when found in, or brought from, a reserved forest or public forest-land, that is to say,—
 - (i.) trees and leaves, flowers and fruits, and all other parts or produce not hereinafter mentioned of trees;
 - (ii.) plants not being trees (including grass, creepers, reeds, and moss), and all parts or produce of such plants;
 - (iii.) wild animals and skins, tusks, horns, bones, silk cocoons, honey and wax, edible birds' nests, bats' guano, and all other parts or produce of animals; and
 - (iv.) peat, surface-soil, rock and minerals (including limestone, laterite, mineral oils, and all products of mines or quarries); and
 - (b) the following, whether found in, or brought from, any such forest or forest-land, or not, that is to say,—
 - timber, charcoal, caoutchouc, catechu, wood-oil, resin, natural varnish, bark, lac, mahua flowers, and myrabolams;
- (7) "land at the disposal of the Government" means land in respect of which no person has acquired either—
- (a) a permanent, heritable and transferable right of use and occupancy under any law for the time being in force; or
 - (b) any right created by grant or lease made or continued by, or on behalf of, the British Government:
- (8) "Magistrate" means a Magistrate of the first or second class, and any Magistrate of the third class specially empowered by the Local Government to try forest offences;
- (9) "property mark" means a mark placed on timber to denote that, after all purchase money or royalties due to the Government shall have been paid, the owner of the mark has or will have a right of property in the timber;
- (10) "public forest land" means land at the disposal of the Government, and not included in a reserved forest;
- (11) "reserved forest" means and includes a forest and every part of a forest—
- (a) declared to be a reserved forest under the provisions of Section 18 of this Act or the corresponding section of any enactment previously in force in Burma; or
 - (b) declared to be a reserved forest under the provisions of any rules in force in Lower Burma previous to the 1st of July, 1882, and brought within the provisions of the Burma Forest Act, 1881, by Section 30 of that Act,

which shall not, at the time being, have ceased to be a reserved forest under Section 29 of this Act or the corresponding provision of any such enactment or rules:

(12) "river" includes also streams, canals, creeks, and other channels, natural or artificial:

(13) "shifting cultivation" includes *taungya* cultivation and cultivation of such other kinds as the Local Government may, by notification, declare to be shifting cultivation for the purposes of this Act:

(14) "timber" includes trees when they have fallen or have been felled, and all wood, whether cut up or fashioned or hollowed out for any purpose or not:

(15) "tree" includes palms, bamboos, stumps, brushwood, and canes.

CHAPTER II.

RESERVED FORESTS.

Power to Constitute Reserved Forests.

4. The Local Government may constitute any land at the disposal of the Government a reserved forest in manner hereinafter provided.

Procedure, etc., on Proposal to constitute Reserved Forests.

5. (1) Whenever it is proposed to constitute any land a reserved forest, the Local Government shall publish a notification—

- (a) specifying as nearly as possible the situation and limits of such land;
- (b) declaring that it is proposed to constitute such land a reserved forest;
- (c) appointing an officer (hereinafter called the Forest-settlement-officer) to inquire into and determine the existence, nature, and extent of any rights claimed by or alleged to exist in favour of any person in or over any land comprised within such limits, and any claims relating to the practice within such limits of shifting cultivation, and to deal with the same as provided in this Chapter.

(2) The Forest-settlement-officer shall ordinarily be a person other than a Forest-officer, but the Forest-officer may be appointed by the Local Government to assist the Forest-settlement-officer in the inquiry prescribed by this Chapter.

6. When a notification has been published under Section 5, the Forest-settlement-officer shall publish in the language of the country, at the headquarters of each township or Shan State in which any portion of the land mentioned in such notification is situate, and in every town and village in the neighbourhood of such land, a proclamation—

- (a) specifying as nearly as possible the situation and limits of the forest proposed for reservation;
- (b) setting forth the substance of the provisions of the next following section;
- (c) explaining the consequences which, as hereinafter provided, will ensue on the reservation of such forest; and

- (d) fixing a period of not less than three months from the date of the publication of such proclamation, and requiring every person claiming any right or making any claim referred to or mentioned in Section 5 either to present to such officer within such period a written notice specifying, or to appear before him within such period, and state the nature of such right or claim.

[Sections 7-17 relate to the settlement of various claims which may be presented for the continuance of certain rights—right-of-way, water rights, cultivation rights, and so on—after the Government has issued a notification declaring its intention of constituting an area a reserved forest.]

Constitution of Reserved Forests and Powers, Rights, and Duties therein.

18. (1) When the following events have occurred, namely,—

- (a) the period fixed under Section 6 for preferring claims has elapsed, and all claims, if any, made within such period have been disposed of by the Forest-settlement-officer, and
- (b) if such claims have been made, the period fixed by Section 14 for appealing from the orders passed on such claims has elapsed, and all appeals, if any, presented within such period have been disposed of by the appellate officer, and
- (c) all lands, if any, to be included in the forest proposed for reservation which the Forest-settlement-officer has, under Section 13, elected to acquire under the Land Acquisition Act, 1894, have become vested in the Government under that Act,—

the Local Government may publish a notification specifying the limits of the forest which it is intended to reserve, declaring the same to be reserved from a date fixed by such notification, and mentioning the rights and privileges recognised and conceded in respect thereof.

- (2) From the date so fixed such forest shall be deemed to be a reserved forest, and thereupon shall, together with all the produce thereof and animals or things found therein, be deemed to be the property of the Government, subject only to the rights and privileges mentioned in such notification.

[Section 19 limits the period in which claims may be presented for private rights in areas to be converted into reserved forests. Section 20 provides for publication in the native language of the notification referred to in Section 18. Sections 21-25 define certain powers of revision and cancellation of rights retained by the Government.]

26. Subject to the provisions of Section 28, it shall not be lawful for any person to do any of the following acts in a reserved forest, namely:—

- (a) to trespass or pasture cattle or permit cattle to trespass, or

- (b) to fell, cut, girdle, mark, lop, or tap any tree or injure by fire or otherwise any tree or timber, or
- (c) to cause any damage by negligence in felling any tree or cutting or dragging any timber, or
- (d) to kindle, keep, or carry any fire except at such seasons and in such manner as a Forest-Officer specially empowered in this behalf may from time to time notify, or
- (e) to quarry stone, burn lime or charcoal, or collect, subject to any manufacturing process, or remove any forest produce, or
- (f) to clear or break up any land for cultivation or any other purpose, or
- (g) to poison or dynamite water, or,
- (h) in contravention of any rules made by the Local Government, to hunt, shoot, fish, or set traps or snares.

27. Subject to the provisions of Section 28, it shall not be lawful for any person to set fire to a reserved forest, or, in contravention of any rules made by the Local Government, to kindle any fire, or leave any fire burning in such manner as to endanger such a forest.

28. Nothing in section 26, section 27, section 54, or section 55, shall be deemed to prohibit—

- (a) the exercise, in accordance with the orders, if any, passed by the Local Government under Section 12, of any right continued under that section; or
- (b) any act done with the permission in writing of a Forest-officer specially empowered to grant such permission; or
- (c) any practice of shifting cultivation permitted under section 10; or
- (d) the exercise of any right created by grant or contract in the manner described in section 23.

Cessation of Reserve.

29. (1) The Local Government, with the previous sanction of the Governor-General in Council, may, by notification, direct that, from a date to be fixed by such notification, any forest or any portion thereof, reserved under this Act, shall cease to be reserved.

(2) From the date so fixed such forest or portion thereof shall cease to be reserved, but the rights, if any, which have been extinguished therein shall not revive in consequence of such cessation.

CHAPTER III.

GENERAL PROTECTION, ETC., OF FORESTS AND FOREST PRODUCE.

30. (1) All standing teak trees wherever situated, except such as have been expressly alienated by grant or lease made by or on behalf of the British Government, shall be deemed to be the property of the Government and shall be reserved trees.

(2) The Local Government may, by notification, declare that any other trees, or trees of any specified class, standing on any land at the disposal of

the Government, shall, from a date to be fixed by such notification, be reserved trees.

31. No person shall fell, cut, girdle, mark, lop, or tap any reserved tree, or injure by fire or otherwise any reserved tree or the timber of any such tree, except in accordance with rules made by the Local Government in this behalf or as provided by the last section of this Chapter.

32. The Local Government may, by notification, declare that all manufactured catechu or any other kind of forest produce specified in section 3, sub-section (6), clause (b), whether obtained from land at the disposal of the Government or from other lands, shall be subject to the payment of royalty at such rates as may be specified by the notification, and may also by notification declare certain areas from which catechu shall be exempt from royalty.

33. (1) Any person may use free of restriction the forest produce growing upon or found on public forest-land, other than reserved trees and their timber, except as prohibited or otherwise provided by rules made by the Local Government under this section, or by any other enactment or rules for the time being in force.

(2) The Local Government may, by rules in respect of public forest-land,

(a) regulate or prohibit the kindling of fires and prescribe the precautions to be taken to prevent the spreading of fires;

(b) regulate or prohibit the felling, cutting, girdling, marking, lopping, tapping, or injuring by fire or otherwise of any trees or timber, the sawing, conversion, and removal of timber, and the collection and removal of other forest-produce;

(c) regulate or prohibit the manufacture of catechu or the burning of charcoal;

(d) regulate or prohibit the cutting of grass and pasturing of cattle, and regulate the payments, if any, to be made for such cutting or pasturing;

(e) prohibit the poisoning or dynamiting of water, and regulate or prohibit hunting, shooting, and fishing and the setting of traps or snares;

(f) regulate the sale or free grant of forest-produce; and

(g) prescribe the fees, royalties, or other payments for forest-produce, and the manner in which such fees, royalties, or other payments are to be levied, whether in transit or partly in transit, or otherwise.

(3) The Local Government may, by a rule under this section, attach to the breach of any rule under this section any punishment not exceeding imprisonment for a term which may extend to six months, or fine which may extend to five hundred rupees, or both.

(4) The Local Government may exempt any person or class of persons or any local area from the operation of any rule under this section.

34. Nothing in this Chapter or in any rule under this Chapter shall be deemed to prohibit any act done in the exercise of any right or with the permission in writing of a Forest-officer specially empowered to grant such permission.

[Chapter IV. relates to certain duties which may be levied on imported forest produce.]

CHAPTER V.

CONTROL OF FOREST-PRODUCE IN TRANSIT, ETC.

General Control of Forest-produce in Transit, etc.

39. (1) The control of all rivers and their banks as regards the floating of timber, as well as the control of all forest-produce in transit by land or water, is vested in the Local Government, and that Government may make rules to regulate the transit of any forest-produce.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may—

- (a) prescribe the routes by which alone forest-produce may be imported into, exported from, or moved within the territories to which this Act extends;
- (b) prohibit the import, export, collection, or moving of forest-produce without a pass from an officer authorised to issue the same, or otherwise than in accordance with the conditions of such pass;
- (c) provide for the issue, production, and return of such passes;
- (d) fix the fees payable for such passes;
- (e) in the case of timber formed into a raft or fastened to the shore, prohibit the loosening or the setting adrift of such timber by any person not the owner thereof or not acting on behalf of such owner or of the Government;
- (f) provide for the stoppage, reporting, examination, and marking of forest-produce in transit in respect of which there is reason to believe that any money is payable to the Government, or to which it is desirable, for the purposes of this Act, to affix a mark;
- (g) establish revenue-stations to which forest-produce is to be taken by the persons in charge of it for examination, or for the realisation of such money, or in order that such mark may be affixed to it, and prescribe the conditions under which forest-produce is to be brought to, stored at, and removed from such revenue-stations;
- (h) provide for the management and control of such revenue-stations and for regulating the appointment and duties of persons employed thereat;
- (i) authorise the transport of timber, the property of the Government, across any land, and provide for the award and payment of compensation for any damage done by the transport of such timber;
- (j) prohibit the closing up or obstruction of the channel or banks of any river used for the transit of forest-produce, and the throwing of forest-produce, grass, brushwood, branches, or leaves into any such river, or any other act which tends to cause the obstruction of such channel;
- (k) provide for the prevention and removal of any obstruction in the channel or on the banks of any such river, and for recovering the cost of such prevention or removal from the person causing such obstruction;
- (l) prohibit, absolutely or subject to conditions, within specified local

limits, the establishment of sawmills or sawpits, the converting, cutting, burning, concealing, marking, or super-marking of timber, the altering or effacing of any property-marks or classification-marks on the same, and the possession of marking-hammers or other implements used for marking timber;

- (m) regulate the use of marks for timber and the registration of such marks, authorise the refusal or cancellation of the registration of such marks, prescribe the time for which the registration of such marks is to hold good, limit the number of such marks which may be registered by any one person, and provide for the levy of fees for such registration; and

- (n) provide for the issue of licenses to be in possession of marking-hammers and for the levy of fees for such licenses.

(3) The Local Government may, by a rule under this section, attach to the breach of any rule under this section any punishment not exceeding imprisonment for a term which may extend to six months, or fine which may extend to five hundred rupees, or both.

(4) The Local Government may direct that any rule made under this section shall not apply to any specified class of forest produce or to any specified local area.

[Sections 40-45 relate to the collection of drift, stranded, and other timber. Chapter VII.—Sections 46-73—relates to penalties and procedure under the Act.]

CHAPTER VII.

FOREST OFFICERS.

74. The Local Government may invest any Forest-officer with all or any of the following powers to be exercised for the purposes of this Act, namely:—

- (a) the powers of a Demarcation-officer under the Burma Boundaries Act, 1880;
- (b) the powers of a Civil Court to compel the attendance of witnesses and production of documents;
- (c) power to issue search-warrants under the Code of Criminal Procedure, 1898;
- (d) power to hold inquiries into forest-offences, and in the course of such inquiries to receive and record evidence;
- (e) power to notify the seasons and manner in which fire may be kindled, kept, or carried in a reserved forest;
- (f) power to grant any permission referred to in sections 28 and 34;
- (g) power to notify stations for the reception of drift-timber;
- (h) power to give public notice of timber collected under section 40;
- (i) power to take possession of property under this Act;
- (j) power to direct the release of property or withdrawal of charges.

75. All Forest-officers shall be deemed to be public servants within the meaning of the Indian Penal Code.

76. No Forest-officer shall, as principal or agent, trade in forest-produce, or be or become interested in any lease or mortgage of any forest or forest-produce or in any contract for working any forest, whether in British or foreign territory.

[Chapter VIII. contains some supplementary provisions empowering the Government to make rules, indemnifying public servants for acts committed in good faith under the Act, exempting the Government and its officers from claims due to losses incurred while forest-produce is under Government control in transit, except where negligence, malice, or fraud, can be shown, and empowering the Government to acquire land needed for any purpose under the Act. A schedule is added containing a list of enactments repealed by the Act.]

ORGANISATION OF THE FOREST SERVICE.

The Forest Service of Burma is composed as follows:—

1. *The Imperial Forest Service*, consisting of the Chief Conservator, 4 Conservators, 36 Deputy Conservators, 14 Assistant Conservators.

2. *The Provincial Forest Service*, consisting of 9 Extra Deputy Conservators and 22 Extra Assistant Conservators.

3. *The Subordinate Forest Service*, consisting of 26 Rangers and a large staff of Deputy Rangers, Foresters, and Forest Guards.

The salaries of these officials are noted in the following table:—

Chief Conservator	2,000	rupees	per	ensem
Conservators, 1st Grade	1,600	"	"	"
Conservators, 2d Grade	1,400	"	"	"
Conservators, 3d Grade	1,200	"	"	"
*Deputy Conservators:				
1st Grade	1,000	"	"	"
2d Grade	900	"	"	"
3d Grade	750	"	"	"
4th Grade	650	"	"	"
*Assistant Conservators:				
1st Grade	550	"	"	"
2d Grade	450	"	"	"
*Extra Deputy Conservators:				
1st Grade	700	"	"	"
2d Grade	600	"	"	"
3d Grade	550	"	"	"
4th Grade	500	"	"	"
*Extra Assistant Conservators:				
1st Grade	400	"	"	"
2d Grade	350	"	"	"
3d Grade	300	"	"	"
4th Grade	250	"	"	"
Rangers, according to Grade	from 100 to 150			

* The following "Local Allowances" are included: Deputy Conservators and Assistant Conservators, 100 rupees; Extra Deputy Conservators and Extra Assistant Conservators, 50 rupees.

The following are the regulations in force in 1906 for the appointment of Probationers to the Indian Forest Service. They apply to Burma, and contain details in regard to Examinations, Appointment, Pay, Pension, and Leave. These regulations are reprinted from Circular No. 25 F of the Government of India in the Department of Revenue and Agriculture, dated 21st December 1905.

REGULATIONS FOR THE APPOINTMENT OF PROBATIONERS TO THE INDIAN FOREST SERVICE, 1906.

1. The Secretary of State for India in Council will, in the summer of 1906, make not less than ten appointments of Probationers for the Indian Forest Service, provided that so many candidates are in all respects qualified under the conditions hereinafter set forth, upon the results of a competitive examination to be held in London on the 28th August, 1906, by the Civil Service Commissioners.

Appointments. provided that so many candidates are in all respects qualified under the conditions hereinafter set forth, upon the results of a competitive examination to be held in London on the 28th August, 1906, by the Civil Service Commissioners.

2. Applications for admission to the examination must be made on a printed form to be obtained from the Secretary, Judicial and Public Department, India Office,

Admission to Examination. Whitehall, London, S. W., and to be returned to him not later than Saturday, the 30th June 1906. No applications received after that date will be considered.

3. Candidates must have attained the age of 18, and not attained the age of 21, years on the 1st January 1906.

4. Every candidate must be a natural-born British subject. He must be unmarried, and, if he marries before reaching India, he will forfeit his appointment.

5. A candidate must have passed, or must undertake to pass before October 1906 (failing which his selection would be cancelled), the examination of the University of Oxford known as Responsions or the Previous Examination of the University of Cambridge, or some one of the other examinations held (1) by these Universities or (2) by the Universities of London or Dublin or (3) by the Joint Board of Examiners for the Scottish Universities or the Scotch Education Department or (4) by the College Entrance Examination Board of the United States of America, and recognised by the Universities of Oxford or Cambridge as equivalent to the Examination in Responsions or to the Previous Examination, or must have passed an examination at some Foreign University which, in the opin-

Qualifying Examinations. versity of Oxford known as Responsions or the Previous Examination of the University of Cambridge, or some one of the other examinations held (1) by these Universities or (2) by the Universities of London or Dublin or (3) by the Joint Board of Examiners for the Scottish Universities or the Scotch Education Department or (4) by the College Entrance Examination Board of the United States of America, and recognised by the Universities of Oxford or Cambridge as equivalent to the Examination in Responsions or to the Previous Examination, or must have passed an examination at some Foreign University which, in the opin-

ion of the Secretary of State in Council, is at least equivalent to any one of the examinations above mentioned.

Subjects of Examination. 6. The subjects of the competitive examination mentioned in paragraph 1 are as follows: (1) Mechanics and Physics; (2) Chemistry; (3) Botany.

Equal weight will be attached to each of these subjects, and candidates must qualify in each. Candidates must also pass a qualifying examination in German to be conducted by the Civil Service Commissioners simultaneously with the competitive examination. The Syllabus of the Competitive Examination and of the Examination in German forms Appendix I.

7. A fee of 2*l.* is required from every candidate, and instructions as to the manner of payment of this fee, the time and place of the examination, and any other necessary information, will be sent to candidates, on application, by the Civil Service Commissioners.

8. Those candidates who are provisionally successful in the competitive examination will be required, shortly after the result of the examination is declared, to undergo a strict examination by a Medical

Medical Examination. Board at the India Office, at which particular stress will be laid on good vision and hearing. On passing this medical examination, candidates will be deemed to be Probationers for the Indian Forest Service.

9. The period of probation will extend over about three years. For the first two years the Probationers will be re-

Period of Probation. quired to undergo a special course of study at Oxford and to become members of the University, if not so already. During the third year of their probation they will receive practical instruction, visiting under suitable supervision such Continental forests as may be selected for the purpose. Excursions may also be made for purposes of study during the first two years, both in term-time and in the vacations.

10. The Probationers will be required to defray all expenses for lodging, board, tuition, and excursions which they may incur during the period of their probation at Oxford.

Charges. During the third year of practical instruction on the Continent, which will consist of three terms, each Probationer will be required to pay in advance a charge of 60*l.* a term, for which the Secretary of State for India will provide (1) board, lodging, and washing; (2) travelling expenses; and (3) fees to local forest officers, etc.

Course of Study. 11. The prescribed course of study for the Probationers comprises the following subjects:

I.—Subjects auxiliary to Forestry.

- (1) Elementary Organic Chemistry and the Chemistry of Soils.
- (2) Geology.
- (3) Elements of Zoology and Forest Entomology.
- (4) Forest Botany.
- (5) Geometrical Drawing, Mathematics up to and including Plane Trigonometry and Surveying.
- (6) German.
- (7) Engineering (Elementary).
- (8) Book-keeping, in reference to Indian Forest Accounts.

II.—Forestry, Theoretical and Practical, in all its Branches.

12. Every Probationer will be required to conduct himself during the period of probation in a manner satisfactory to the Secretary of State, and to give evidence of satisfactory progress in his studies in such manner as may be required, failing which, or in the event of serious misconduct, he will be liable to have his name removed from the list of the Probationers. A Probationer may also, at the discretion of the Secretary of State, be required from time to time to appear before the Medical Board, and, should the result be unsatisfactory, he will be liable to have his name removed from the list of Probationers.

Diploma of Forestry. 13. During the period of probation the proficiency of the Probationers will be tested by periodical examinations.

The Probationers who satisfy the Examiners in all these examinations, and complete satisfactorily the practical course in Forestry on the Continent, will receive the Diploma of Forestry of the University of Oxford. It is desirable that they should, if possible, also obtain a degree in the Honour School of Natural Science at the University.

14. Probationers who obtain the Diploma of Forestry, and are of sound constitution and free from physical defects which would render them unsuitable for employment in the Indian Forest Service, will be appointed Assistant Conservators in the Indian Forest Department. Their seniority will be determined by the results of the examinations held during their two years' Appointment and Seniority.

residence as Probationers at Oxford and the manner in which they have completed the practical course on the Continent.

They will be allowed at the end of the period of probation to state their preference in respect to the Provinces to which they desire to be allotted; but the distribution will be made to the several Provinces according to the needs of the public service, at the discretion of the Secretary of State for India. Officers are, however, at all times liable to be transferred from one Province to another at the pleasure of the Government of India.

15. Every Probationer, before proceeding to India, will be required to satisfy the Secretary of State, in such manner as may be determined, of his ability to ride. It is desirable that this evidence should be forthcoming before the Probationer proceeds to the Continent for his final period of study.

16. Within a month of his nomination as Assistant Conservator, each nominee must sign articles of agreement describing the terms and conditions of his appointment; he must embark for India when required to do so by the Secretary of State, and must engage his own passage. Failure to embark at the stated time will, in the absence of satisfactory explanation, lead to forfeiture of appointment.

17. An allowance will be granted to each Probationer on signature of his agreement, varying from 50*l.* to 100*l.*, according to the degree of proficiency and diligence shown by him during his practical course upon the Continent.

19. An Assistant Conservator of Forests will draw pay at the rate of Rs. 350 a month from the date of his reporting his arrival in India.

19. Promotion, leave, and pension will be governed by the Regulations laid down by the Government of India, and made applicable to Forest Officers, such Regulations being subject to any modifications or alterations which may be made in them from time to time by the Government of India, and their interpretation in case of any doubt arising being left to that Government. A copy of the existing regulations can be seen on application at the India Office.

Certain information regarding appointments in the upper controlling staff of the Indian Forest Service will be found in Appendix II.; a summary of information regarding Leave is

contained in Appendix III.; regarding Pensions and Provident Fund, in Appendix IV.

INDIA OFFICE,

4th October 1905.

APPENDIX I.

(Referred to in paragraph 6.)

A.—SYLLABUS OF THE COMPETITIVE EXAMINATION.

I.—MECHANICS AND PHYSICS.

Mechanics.

The principles of the lever, the inclined plane, the composition of forces, and virtual work, their experimental investigation and application to machines and other simple cases of equilibrium. Centre of gravity, couple, torque, velocity ratio, mechanical advantage, efficiency. Application to liquids and gases. Density. Boyle's law. Pump, siphon, barometer, manometer. Body moving in a straight line so that its velocity changes proportionally with the time. Body moving uniformly in a circle. Motion of pendulum-bob. Momentum, force, impulse of a force, energy, conservation of energy.

Heat.

Simple thermometry. Simple methods of determining latent heats, specific heats; expansion of gases, liquids and solids; vapour pressures. Change of state. Simple experiments on conduction, convection and radiation. Mechanical equivalent of heat.

Sound.

Direct determination of the velocity of sound in air and in water; the effect of change of temperature on the velocity of sound in air; mode of propagation of sound in air. Simple methods of determining the pitch of a note. Characteristics of musical sounds.

Light.

Laws of reflection and refraction. Simple methods of determining refractive indices, and the focal lengths of mirrors and lenses. The simplest form of the compound microscope,

and of the astronomical telescope. Dispersion, the spectro-scope, spectra of different kinds. Simple photometry. Elementary notions of the determination of the velocity of light.

Electricity and Magnetism.

Properties of electrified bodies. Methods of electrification. Electric induction. The gold leaf electroscope. Elementary quantitative notions of electrical quantity, capacity, potential and special inductive capacity. Condensers. Properties of magnets. Methods of magnetization. Magnetic induction. Simple methods of determining the declination and dip at a place and of comparing magnetic fields and moments. The construction of the batteries of Volta, Daniell, and Leclanché, and their theory. The secondary battery. The physical and chemical action due to a current. Simple galvanometers, ammeters, and voltmeters. Measurement of current-strength, electromotive force and resistance. The production of currents by electro-magnetic induction. The broad principles of the induction-coil and dynamo.

PRACTICAL EXAMINATION.

Simple experiments illustrating the principles stated above.

II.—CHEMISTRY.

The simpler chemical and physical properties of common substances, such as lime, salt, sugar, water, air.

The preparation (excluding details of technical processes) and properties of the following substances:—

The metals, tin, lead, iron, copper, zinc, magnesium, calcium, potassium, sodium; their simpler and more important compounds, specially such as occur naturally, and such compounds and alloys as are used in the Arts.

Hydrogen, oxygen, water, ozone, hydrogen-peroxide.

Nitrogen, ammonia, ammonium salts, nitrous oxide, nitric oxide, nitrogen peroxide, nitrates.

Carbon, carbon dioxide, carbonates, carbon monoxide.

Chlorine, bromine, iodine, chlorides, bromides, iodides, chlorates, hypochlorites.

Sulphur, sulphuretted hydrogen, sulphides, sulphur dioxide, sulphur trioxide, sulphites, sulphates.

Phosphorus, phosphoretted hydrogen, phosphorus trioxide,

phosphorus pentoxide, orthophosphates, phosphorus trichloride, phosphorus pentachloride.

Silica.

The principles of chemical change; oxidation and reduction; combustion; flame. Allotropy. Methods of purifying bodies. Methods of determining the composition of air and water. Laws of chemical combination. Diffusion of gases. The atomic and molecular hypotheses. The simpler methods of determining equivalents. General considerations used in determining molecular weights and atomic weights. Chemical notation.

Alcohol, ethane, and the simpler ethylic compounds, considered in detail as typical bodies. Methylic alcohol and methane, and benzylic alcohol and toluene, considered briefly as analogues of alcohol and ethane. Characters of primary normal alcohols in general, and of their corresponding hydrocarbons.

Acetic acid, aldehyd and the simpler acetic compounds, considered in detail as typical bodies. Benzoic acid and benzaldehyd, and formic acid and form-aldehyd, considered briefly as analogues of acetic acid and aldehyd. Characters of normal mon-acids in general and of their corresponding aldehyds.

Oxalic acid and the simpler oxalic compounds. Characters of normal di-acids in general.

Processes (i) for the detection of carbon, hydrogen, nitrogen, sulphur in organic compounds; (ii) for the estimation of carbon, hydrogen, nitrogen, in organic compounds; (iii) for the production and analysis of the silver-salts of organic acids and the platinum-salts of organic bases; (iv) for the determination of vapour densities by the V. Meyer method.

The determination of the formula of an organic compound.

PRACTICAL EXAMINATION.

The practical examination may include:—

Simple experiments and preparations illustrating the properties of the inorganic substances named above.

Simple quantitative experiments, such as, the determination of the loss of weight on heating a body, the determination of the volume of gas evolved on the solution of zinc in acid. The volumetric estimation of acids and alkalies.

The qualitative analysis of simple salts containing not more than one of the following metals, and one of the following acid radicals:—Sodium, potassium, ammonium, calcium, magnesium,

zinc, copper, iron, lead, tin, oxide, carbonate, chloride, sulphate, nitrate, sulphide.

III.—BOTANY.

The following plants as exhibiting the life-history of plants; the relation of the plant to external conditions; the processes and mechanisms of nutrition, growth, and reproduction; the structure and functions of the parts of the plant:—

Angiosperms: *helianthus*, *tilia*, *zea*. Gymnosperms: *pinus*. Pteridophyta: *aspidium*, *equisetum*. Bryophyta: *funaria*, *pellia*. Algæ: *vaucheria*, *chlorococcus*. Fungi: *bacterium*, a lichen, a parasitic fungus.

PRACTICAL EXAMINATION.

Candidates will be expected to show an adequate acquaintance with the microscopical examination of the chief plant tissues, and to describe typical specimens and preparations.

B.—SYLLABUS OF THE QUALIFYING EXAMINATION IN GERMAN.

Translation from and into German Composition, and Conversation.

APPENDIX II.

LIST OF APPOINTMENTS IN THE UPPER CONTROLLING STAFF OF THE INDIAN FOREST SERVICE.

<i>Number according to existing sanctioned posts.</i>	<i>Appointment.</i>	<i>Salary.</i>
INDIA.		
1	Inspector General of Forests	{ Rs. 2,000 a month rising by annual increments of Rs. 100 a month to Rs. 2,500 a month.
1	Assistant Inspector General of Forests	Pay of grade
		Rs.
4	1st grade Conservators	1,600 a month
5	2nd "	1,400 "
4	3rd "	1,200 "
Imperial Forest School:—		
1	Deputy Director	} Pay of grade
2	Instructors	
9 (4 temporary)	Foreign Service appointments	" "
BURMA.		
5	Deputy Conservators, 1st grade	900 a month
5	" " 2nd "	800 "
5	" " 3rd "	650 "
7	" " 4th "	550 "
8	Assistant " 1st "	450 "
7	Assistant " 2nd "	350 "

APPENDIX III.

LEAVE.

1. The following is a summary of the principal regulations relating to the leave admissible to officers appointed to the Indian Forest Service by the Secretary of State from the United Kingdom.

Long Leave.

2. Furlough is admissible to an aggregate amount of six years during the service. The amount "earned" is one-fourth of an officer's active service, and the amount "due" is that amount less any enjoyed.

3. Furlough without medical certificate can, if due, be generally taken after eight years' active service, and again after three years' continuous service. It is limited to two years at a time.

4. Furlough with medical certificate is limited to one year if an officer has not served three years continuously; otherwise he may have leave up to two years, and it may be extended to a third year.

5. The allowances admissible during furlough are:—

(1) During the first two years of furlough without medical certificate and during so much of furlough with medical certificate as may be "due,"—half average salary, subject to certain maximum and minimum limits.

(2) After the expiration of the period for which the foregoing allowances are admissible,—one quarter of average salary, subject to certain maximum and minimum limits.

Short Leave.

6. Privilege leave is a holiday which may be granted to the extent of one-eleventh part of the time that an officer has been on duty without interruption; and it may be accumulated up to three months, earned by 33 months' service. During privilege leave, the officer retains a lien on his appointment, and receives the salary which he would have received if on duty. An interval of not less than six months must elapse between two periods of absence on privilege leave.

Privilege leave may be prefixed to furlough, special leave, or extraordinary leave without allowances. The whole period

of leave thus taken in combination is known as combined leave. Combined leave (except when consisting of privilege leave and extraordinary leave without allowances) may not be of less duration than six months, nor, except on medical certificate, may it be extended beyond two years.

7. Special leave may be granted at any time for not more than six months, with intervals of six years' service; allowances, calculated as during furlough, are given during the first six months only, whether taken in one or more instalments. This leave is included in the aggregate of six years' furlough admissible.

8. Extraordinary leave without allowances may be granted in case of necessity, and, except in certain specified cases, only when no other kind of leave is by rule admissible. It may be granted in continuation of other leave.

9. Subsidiary leave in India for a minimum of ten days, usually with half average salary, is granted to an officer proceeding on or returning from leave out of India, or on retirement, to enable him to reach the port of embarkation or to rejoin his appointment. It is admissible only at the end and not at the beginning of combined leave.

10. Short leave is also granted to enable officers to appear at examinations, etc.

General Rules.

11. Leave of absence, whether on furlough or on privilege leave, can never be claimed as of right, and is given or refused at the discretion of Government.

12. After five years' continuous absence from duty, an officer is considered to be out of the employment of Government.

13. When leave allowances are paid at the Home Treasury, or in a Colony where the standard of currency is gold, rupees are converted into sterling at the rate of exchange fixed for the time being for the adjustment of financial transactions between the Imperial and Indian Treasuries, unless any other rate has been exceptionally authorised. But for the present the rate of conversion is subject to a minimum of 1s. 6d. to the rupee.

APPENDIX IV.

PENSIONS AND PROVIDENT FUND.

1. The following is a summary of the principal pension rules applicable to officers of the Indian Forest Service appointed by the Secretary of State from the United Kingdom.

An officer of the Indian Forest Service is eligible for a pension on voluntary retirement after completing 20 years' qualifying service or attaining the age of 55 years. If at an earlier date he is compelled to retire from the service through ill-health not occasioned by irregular or intemperate habits, he becomes eligible for an invalid pension or a gratuity according to the length of his service.

The amount of pension or gratuity is regulated as follows:—

After a service of less than ten years, an invalid gratuity not exceeding one month's emoluments for each completed year of service.

After a service of not less than ten years, an invalid pension not exceeding the following amounts:—

Years of completed service.	Scale of pension. Sixtieths of average emoluments.	Maximum limit of pension.	
		Rs.	Rs.
10	20	1,000 a year or	83½ a month.
11	21	1,400 " "	116½ "
12	22	1,800 " "	150 "
13	23	2,200 " "	183½ "
14	24	2,600 " "	216½ "
15	25	3,000 " "	250 "
16	26		
17	27		
18	28		
19	29		

After a service of not less than twenty years, a retiring pension not exceeding the following amounts:—

Years of completed service.	Scale of pension. Sixtieths of average emoluments.	Maximum limit of pension.	
		Rs.	Rs.
20 to 24 }	30	{ 4,000 a year or 333½ a month.	
25 and above }		{ 5,000 " " 416½ "	

Officers who have shown special energy and efficiency during an effective service of three years as Inspector-General of Forests or Conservator (1st grade) may, at the discretion of the Government of India, be allowed an additional pension of Rs. 1,000 a year.

Subject to certain prescribed conditions, rupee pensions are now issued to pensioners residing in gold standard countries at the rate of exchange of 1s. 9d. the rupee.

2. A Provident Fund has also been established on the following basis:—

- (a) The contribution is compulsory up to 5 per cent. on salaries, with voluntary contributions of a further 5 per cent.; while on leave, an officer may subscribe any sum he pleases, subject to a minimum of 5 per cent. on his leave allowances and a maximum of 10 per cent. on his salary.
- (b) Compound interest on such payments is annually credited by Government to each officer subscribing, the rate being at present 4 per cent. per annum.
- (c) Receipts and payments are made in rupees only.
- (d) The sum which will thus accumulate to the credit of an officer to be his absolute property, to be handed over to him unconditionally on quitting the service; or, in the event of his death before retirement, to his legal representatives.

THE WORK OF THE FOREST DEPARTMENT.

For the purposes of forest administration the Province of Burma is divided into 4 Forest Circles, and 36 Divisions, which in turn are divided into Subdivisions and Ranges.

Lower Burma, is divided into the Tenasserim Circle and the Pegu Circle; Upper Burma, into the Northern Circle and the Southern Circle, to the latter of which are attached the Southern Shan States.

The following general account of the work of the Forest Department is taken, by kind permission of the author, from Dr. John Nisbet's *Burma under British Rule—and Before*.

Whenever it is proposed to reserve any particular tract of forest, the Forest-Officer who has examined it submits his proposals, stating the objects of the reservation and giving the results of his inspection, a description of the tract, and a statement of the boundaries proposed. This report, accompanied by a map, is then forwarded to the Deputy Commissioner, the chief civil authority in the district. After considering the proposals and recording his concurrence or objections, the project is transmitted to the Commissioner of the Division, is forwarded by him to the Conservator of Forests of the circle concerned, and is submitted by the latter, through the Revenue Secretary of the General Secretariat, for the orders of the Local Government. Thus, before any of the necessary legal steps are taken

towards reservation, the civil authorities have an opportunity of recording any *prima facie* objections they feel towards the proposals, and the Conservator of Forests has the opportunity of explaining away their objections or of adducing additional arguments in favour of reservation.

On such proposals being preliminarily approved by the Local Government, a notification is issued in the *Official Gazette* specifying the situation and the limits of the land, intimating that it is proposed to constitute the same a reserved forest, and appointing a civil officer as Forest-settlement-officer to inquire into and determine the existence, nature, and extent of any rights or claims to the exercise of privileges of various kinds within the specified tract. This notification is also published in Burmese at the headquarters of the township concerned, and copies of it, together with an explanation of the consequences that will ensue on reservation, are distributed to all the villages and hamlets situated in the vicinity of the tract in question, while a period of not less than three months is allowed during which the villagers may make written or verbal objection to the reservation. When this period has elapsed, the Forest-settlement-officer visits the localities in question and makes formal inquiry into the objections raised. Duly empowered with special legal authority, he may alter the boundaries of the proposed reserve so as to exclude land for the exercise of *taungya*, or shifting cultivation, or may include *taungya* areas as separately demarcated tracts within the reserve, or may refuse to permit this class of cultivation if amply sufficient land exists for its exercise outside the proposed boundaries. Rights of way, of watercourses, of water user, of pasture, and of forest-produce, are also adjudicated on. If such claims are found reasonable, they are provided for by excluding sufficient land for their exercise, by recording an order granting the privilege of pasturing so many head of cattle or of extracting certain quantities of forest-produce annually, or by commuting the rights into a payment of money or a grant of land.

On the termination of the inquiry the proceedings of the Forest-settlement-officer are sent to the Deputy Commissioner of the district, and a period of three months is allowed for the filing of objections to the decisions which have been arrived at. If such are received, the Deputy Commissioner acts as appellate officer, and approves, modifies, or upsets the judgments made by the Settlement-officer. The settlement proceedings are then forwarded to the Commissioner of the Division for review and remark, and they are then forwarded to the Conservator

of the Forest Circle concerned for submission to the Local Government. It is not until all these prescribed legal steps have been taken and the whole of the proceedings subjected to careful scrutiny by various responsible officers and by the Revenue Department of the Government that final orders are issued declaring the area in question to be a reserved forest from a given date.

Carefully as the existing rights of village communities and of individual villagers or hill tribesmen are thus inquired into and safeguarded, legal provision is made for the revision by the Local Government of any such notification during the following five years. Further than this, provision is made under the Forest Act for enabling the Local Government to direct that any reserve or portion of a reserve shall cease to be reserved. Thus, if land suitable for permanent self-sustaining cultivation should happen to have been included within a forest reserve, and the increase of population should subsequently show that it is desirable to throw it out of reservation and utilise it agriculturally, the necessary power for effecting such changes is provided in proper legal form. The following table shows the area of reserved forest in Burma in various years:—

AREA OF RESERVED FORESTS IN BURMA.

(IN ACRES.)

Circle.	1885.	1900.	1904.
Tenasserim Circle	2,644,996	2,711,194	2,989,208
Pegu Circle	1,880,337	2,879,125	3,367,130
Northern Circle*	1,534,160	2,741,432	3,061,784
Southern Circle*	1,287,360	2,645,416	3,406,845
Total Burma	7,346,873	10,977,167	12,824,967

Within the reserved forests everything is the property of the Government, except in so far as absolute ownership has been modified at the time of reservation. On all other forest-land, teak and certain reserved trees are the property of the Government, and neither teak nor reserved trees can be cut on unreserved forest tracts without special licenses. The felling of unreserved trees growing on unreserved forest areas can take place without restriction by residents in the vicinity of the

* Prior to 1900 Upper Burma was divided into an Eastern Circle and a Western Circle instead of a Northern and a Southern Circle.

forests, provided the timber is to be used for *bona fide* agricultural, fishery, or domestic purposes, or for religious works of public utility; but the felling of timber, fuel, and the collection of other forest-produce for trade purposes can only take place under license and upon payment of revenue.

The policy adopted is to confine the work of extraction as far as possible to unreserved forests, so as thus to utilise the existing supplies of timber of all sorts before these areas are ultimately cleared for permanent cultivation. Nothing is done in the unreserved areas for regeneration and reproduction. The forests are left to nature, and the only protection given is to restrict the felling to trees of mature growth. Trade licenses are given under suitable restrictions for all kinds of reserved and unreserved woods, except teak, whether growing in reserved or in unreserved forests; but the entire control of teak, wherever growing, remains now, as formerly, in the hands of the Forest Department.

The following table shows the proportions of teak, reserved woods, and unreserved woods extracted from reserved forests and from unreserved forests during 1904. The figures represent cubic feet, solid.

EXTRACTION OF TIMBER FROM THE FORESTS OF BURMA, 1904.

Kind of Wood.	From Reserved Forests.	From Unreserved Forests.	Total.
Teak	5,707,680	6,147,204	11,854,884
Reserved woods	428,657	2,284,484	2,713,141
Unreserved woods . . .	877,430	13,362,848	14,240,278
Total	7,013,767	21,814,536	28,828,303

It is seen from the above table that of the total timber production of Burma more than three-fourths is drawn from unreserved forests; that of the production of reserved and unreserved woods, other than teak, about eight-ninths is drawn from unreserved forests; and that of the teak production a little more than half is drawn from unreserved forests.

The moment a forest has been declared a State reserve it is, save under exceptional circumstances, absolutely closed to the Management of the State Reserve Forests. It is even closed against State operationally authorised. It is even closed against State operationally authorised.

tions until a working plan has been specially prepared for its future treatment.

The first regular working plan of this sort was made in 1884, and since then steady progress has been made in the provision of sound schemes for working the reserved forests. The basis of such plans is a map on a scale of four inches to the mile, showing all the topographical details of streams, hill-ranges, ravines, dells, swamps, and the like. The preparation of these maps is intrusted partly to the Topographical Survey Branch of the Survey of India and partly to the Forest Survey Branch; and for some years past several survey parties have been continually employed in Burma for the preparation of the maps necessary before the forest working-plan parties can operate.

On the receipt of the maps, each working circle—as the area is called to which the provisions of one working plan are intended to apply—is marked out in suitable blocks and subdivided into compartments formed with due regard to the configuration of the soil and its natural boundaries. The compartments often vary considerably in size according to the nature of the forest and the quantity of teak contained in it, but they usually average about one square mile or more in extent. All over the forest sample plots are marked off so as to be fairly evenly distributed throughout the area, and these, amounting to between one-fifth and one-fourth of the whole working circle, are carefully examined to ascertain the existing stock of teak-trees of different girth-classes, from seedlings and poles below three feet in girth up to mature trees above seven feet in girth, and of other reserved trees girdling over three feet. At the same time investigations regarding the rate of the growth of teak are made; and the working plan for the circle is based on the data acquired by counting out the sample plots and by estimating the rate of growth.

When the field work has thus been completed, a working-plan report is prepared. It first of all gives a description of the situation, soil, and climate of the tract dealt with, of the composition and condition of the forest, of the past system of management, and of the extent to which the forest produce has been utilised. The bases of the proposals are then detailed, giving the existing stock as estimated by the countings on the sample areas, and the ascertained rate of growth of teak from girth-class to girth-class.

The working plan usually confines itself to proposals in regard to the girdling of teak, because the supplies of other kinds

of reserved trees are not, unless in exceptional cases, intended to be utilised from reserved forests so long as supplies are still available in the unreserved forests. Except in the very dry forests, where teak does not attain such large dimensions as in the moister tracts, the girdling proposals are limited to trees of seven feet or more in girth. Along with these specific girdling proposals for teak, recommendations are also made with regard to works of improvement, such as sowing, planting, fire protection, cutting of woody climbers and epiphytic *fici*, and blasting operations for facilitating the work of floating.

No working plan for any reserved forest can come into operation before it has been approved by the Local Government, and this approval is not given without careful consideration. While the field operations are still in progress, the working-plans officer, who has previously discussed the matter with his Conservator, and who is always in direct communication with him, submits a preliminary report setting forth the nature and condition of the forest and sketching the proposals he intends to make. This report is forwarded to the Inspector-General of Forests in India, and returned to the Conservator along with any criticisms or suggestions which seem desirable. On the working plan and forest maps being completed, they are submitted by the Conservator to the Local Government and forwarded by it to the Inspector-General for his opinion and advice; and it is not until the Local Government is assured that its technical advisers, the Conservator and the Inspector-General, concur in the proposals submitted that these are approved and applied to the forest circle concerned.

The work of the Forest Department, in so far as it covers the commercial exploitation of the Burma forests, is described in the following section.

COMMERCIAL EXPLOITATION OF THE BURMA FORESTS.

It will be remembered that the cause of the Third Burmese War was the refusal of the Court of Ava to submit to the investigation of a mixed court, as accorded by treaty rights, the question of alleged malpractices on the part of the Bombay-Burma Trading Corporation in its forest operations in Upper Burma. On the assumption of sovereignty by the British the Government practically renewed the arrangements which had existed between the King of Ava and the Corporation by granting forest leases at very low rates of royalty.

With vast sources of supply at its command at nominal rates of royalty, the Corporation practically commanded the teak market, and the timber trade of Burma was exposed to the grave danger of becoming almost an absolute monopoly in the hands of the Corporation. The few other firms dealing exclusively in timber, which, having no forest leases, were compelled to procure the supplies for their sawmills from the Government auction sales of timber extracted by Government agency, could not hope to compete successfully against the Corporation, which drew its supplies independently on payment of a very small royalty. It appeared advisable, therefore, in the general interest to afford some sort of assistance to the smaller firms. This was arranged by granting a purchase contract (leases of forests having been forbidden by the Government of India in 1873) for the extraction of timber from certain forests to the firm of Messrs. Macgregor & Co.

The policy thus initiated in 1889 has been consistently followed, and at the present time several firms have contracts for the extraction of timber from different forest areas, whilst other tracts are worked by the Forest Department through the agency of native contractors.

The determination of the number of trees to be girdled in all forests rests with the Forest Department, and the work of marking trees for felling is carried out only by officers of the Department; but the actual felling and extraction of timber is performed partly by the agents of the firms having purchase contracts and partly by the agents of the Forest Department. The timber extracted by the Forest Department is sold by public auction at the Government depots at Rangoon and Mandalay.

In addition to the timber extracted by the Government and by the holders of purchase contracts a small amount is extracted by persons to whom the Government has allowed, for one reason or another, limited free grants for extraction; and until within recent years a small amount was extracted by persons holding forest-rights recognised by the Government at the time of making the forest settlement of reserved forest areas.

The following table shows the extraction of timber by the various agencies in several years:—

OUT-TURN OF TIMBER FROM THE FORESTS OF BURMA.

(IN CUBIC FEET, SOLID.)

	<i>Removed by Government.</i>	<i>Removed by Purchasers.</i>	<i>Removed by Free Grantees.</i>	<i>Removed by Right Holders.</i>	<i>Total.</i>
1895.					
All woods	2,346,481	17,822,189	317,838	79,250	20,565,758
Teak . .	2,254,312	9,649,563	294,033	40,151	12,238,059
1900.					
All woods	3,124,356	22,918,991	376,073	350,524	26,769,944
Teak . .	2,988,856	10,415,615	285,531	50,735	13,740,737
1904.					
All woods	5,268,119	22,723,216	302,821	534,147	28,828,303
Teak . .	5,102,824	6,656,409	130,941	none	11,890,174

In addition to timber the forests of Burma yield a valuable product of minor forest-produce and of fuel. The value of minor forest-produce—chiefly bamboos, canes, cutch—and the quantity of fuel (for which no return of value is made) taken from the forests of Burma during several years are shown in the following table:—

OUT-TURN OF MINOR FOREST-PRODUCE AND FUEL
FROM THE FORESTS OF BURMA.

	<i>Minor Forest Produce. (Value in rupees.)</i>	<i>Fuel. (Quantity in cubic feet.)</i>
1895	386,804	11,152,041
1900	480,417	12,915,240
1904	448,260	19,719,078

THE FINANCES OF THE FOREST DEPARTMENT.

The general financial results of forest administration in Burma are shown in the following table:—

FINANCIAL RESULTS OF FOREST ADMINISTRATION.

	<i>Gross Revenue.</i>	<i>Expenditure.</i>	<i>Surplus.</i>
	<i>Rupees.</i>	<i>Rupees.</i>	<i>Rupees.</i>
1895	5,205,886	1,864,501	3,731,385
1900	7,987,298	2,697,010	5,290,288
1904	8,519,404	3,500,311	5,019,093

The revenue of the Forest Department is derived from the sale of timber and other produce removed from the forests by Government agency, from royalty and other payments made by purchasers and consumers removing their own supplies from the forests, from the sale of grazing rights and fodder, from the sale of confiscated wood (very largely drift wood collected by the Department from the rivers), and from duty imposed on foreign timber and other produce. The details of revenue and expenditure for several years appear in the following tables:—

DETAILS OF FOREST REVENUE.

(IN RUPEES.)

Sources of Revenue.	1895.	1900.	1904.
Timber and other produce removed by Government	2,127,217	3,139,532	4,329,281
Removed by purchasers and consumers:			
Timber	2,407,214	3,672,787	2,985,216
Firewood and charcoal	82,942	112,031	161,465
Bamboos and canes	133,035	155,449	191,048
Grazing and fodder	922	1,696	2,523
Other minor produce	253,614	285,742	141,529
Confiscated wood	207,876	217,006	240,744
Duty on foreign products	307,828	312,883	363,377
Miscellaneous	75,228	90,172	104,191
Grand total gross revenue	5,505,886	7,987,298	8,519,494

DETAILS OF FOREST EXPENDITURE.

(IN RUPEES.)

Objects of Expenditure.	1895.	1900.	1904.
Conservancy and works:			
Cost of extracting timber and other produce by Government	614,197	949,089	1,249,793
Organisation, improvement, and extension of forests	192,732	427,884	608,030
Communications and buildings	38,933	53,902	141,652
Live stock, tools, and other charges,	221,186	264,296	280,328
Establishments:			
Salaries	677,064	834,625	1,008,669
Travelling allowances	89,883	122,469	154,390
Contingencies	30,486	44,805	57,449
Total Conservancy and Works	1,067,068	1,695,171	2,279,803
Total Establishments	797,433	1,001,839	1,220,508
Grand Total Expenditure	1,864,501	2,697,010	3,500,311

Further statistics relating to forest administration in Burma will be found in Appendix Q of this volume. At the moment this volume is going to press the *Reports on Forest Administration in Burma* for 1904-05 have reached me. The following are the principal figures for 1904-05: Gross Revenue, Rs. 10,961,494; Expenditure, Rs. 3,514,997; Surplus, Rs. 7,446,497; total out-turn of timber, 32,798,445 cubic feet; out-turn of teak, 11,068,104 cubic feet; out-turn of fuel, 22,061,720 cubic feet; value of out-turn of minor forest-produce, Rs. 581,891.

CHAPTER XV.

PUBLIC WORKS

REFERENCES.

- Strachey, Sir John, and Strachey, Lt.-Gen. Richard. *The Finances and Public Works of India from 1869 to 1881.* London, Kegan Paul, 1882, pp. xx + 468.
- Strachey, Sir John. *India: Its Administration and Progress.* London, Macmillan, third edition, 1903, pp. xxii + 515. *Map.*
- Government of India. *Public Works Department Code. General Regulations.* Calcutta, Govt. Press, 1901, 1902, 2 vols., pp. xxxv + 577 + cxliii, and xxix + 414 + xxiii.
- Railway Board. *Classified List of State Railway Establishment and Distribution Return of Establishment of All Railways, corrected up to 30th June, 1905.* Calcutta, Govt. Press, 1905, pp. 129 + 12.
- Railway Board. *Histories of Railway Projects, including Tramways, corrected up to 30th June, 1905.* Simla, Govt. Press, 1905. Folio, pp. xi + 49 + 11. *Map.*
- Railway Board. *Administration Report on the Railways in India for the Calendar Year 1904.* Simla, Govt. Press, 1905. Folio, pp. iii + 271. *Map, Statistical Chart.*
- Government of India. *Public Works Department. Classified List and Distribution Return of Establishment, corrected up to 30th June, 1905.* Calcutta, Govt. Press, 1905.
- The Quarterly Civil List of Burma, No. CXLV, corrected up to 1st July, 1906. Rangoon, Govt. Press, 1906, pp. viii + 398 + xxxi.
- Administration Report of the Public Works Department, Burma (Buildings and Roads Branch), excluding Irrigation. Rangoon, Govt. Press. Annual. *Maps.*
- Administration Report of the Public Works Department, Burma (Irrigation). Rangoon, Govt. Press. Annual. *Maps.*
- Mandalay Canal Project (Revised Estimate). Rangoon, Govt. Press, 1901. Folio, pp. 4 + 86.
- Shwebo Canal Project, 1899. Rangoon, Govt. Press, 1899. Folio, pp. 2 + 58 + 38 pages of annexures variously numbered. *Map.*
- Món Canals Project, 1900. Rangoon, Govt. Press, 1901. Folio, pp. 2 + 3 + 109.

GENERAL ORGANISATION OF THE PUBLIC WORKS DEPARTMENT.

The establishment of the Public Works Department is divided into two distinct branches,—the Executive and the Accounts.

The duties of the Accounts branch of the department are connected with the preparation of accounts in Executive Engineers' offices, the control and audit of expenditures incurred by the Executive branch, and by other persons who may be intrusted with the expenditure of Government funds from the grant for Public Works. The staff of the Accounts branch is made up of Examiners of Accounts, Deputy Examiners, Assistant Examiners, and Accountants. The scale of pay for all officers of the Accounts branch appointed subsequently to 1st January, 1893, is as follows:—

SCALE OF PAY IN ACCOUNTS BRANCH.

Officials.	Class.	Grade.	Pay per mensem in Rupees.
Examiners	I.	—	1,500
Examiners	II.	—	1,250
Examiners	III.	—	1,000
Examiners	IV. {	1	900
		2	800
		3	700
Deputy Examiners . . .	I.	—	600
Deputy Examiners . . .	II.	—	400
Assistant Examiners . .	— {	1	300
		2	250
		3	200
Accountants	— {	1	350-450
		2	250-340
		3	160-240
		4	80-150

Appointments in the Accounts branch, down to the grade of Assistant Examiner, are made by the Government of India. Accountants are appointed by the Local Government.

Superior officers of the Accounts branch (*i.e.*, officers of or above the grade of Assistant Examiners) are recruited either in

England or in India. In the former case they are appointed by the Secretary of State for India from amongst the students of the Royal Indian Engineering College, Cooper's Hill. In the later case they are secured either by the promotion of deserving subordinates or by the competitive examination of candidates nominated by the Accountant-General of the Public Works Department. Of all the appointments made in each year the general rule is that four-ninths are given to persons appointed in England, three-ninths to persons promoted from

the subordinate establishment, and two-ninths to successful candidates at the competitive examination; but the Government of India reserves the power of making appointments in special and exceptional cases otherwise than in the manner described above.

The appointments made in India are on probation only, and carry the rank of Assistant Examiner of the third grade. No Assistant Examiner may be confirmed in his appointment or, having been confirmed, may be promoted above the third grade unless he has passed the Lower Departmental Examination; and no officer, however appointed, is eligible for promotion above Assistant Examiner of the first grade until he has passed the Higher Departmental Examination and the prescribed examinations in the vernacular.

As a general rule, no one is admitted to the subordinate establishment of the Accounts branch otherwise than by entering as an Accountant of the fourth grade, after passing an examination in writing, dictation, arithmetic, mensuration, and book-keeping. Appointments as Accountant, fourth grade, are probationary for one year, and confirmation in the post is dependent upon a favourable report from the Examiner under whom the Accountant has been serving, and upon passing an examination in some one section of Public Works Accounts. No Accountant can rise above the second grade until he has passed a departmental examination divided into three parts, the first comprising a general educational test, the second consisting of a test in composition, and the third involving a thorough test in book-keeping and departmental accounts and procedure.

The Executive Branch of the Public Works Department includes all officers and other persons necessary for the preparation of designs and estimates, the supervision and control of the work executed, and the disbursement of money, together with the requisite office establishment. It is subdivided into Railway establishments and Provincial establishments for all works in the Province carried out under the orders of the Local Government. The Executive branch is classified as follows:—I. Engineer establishment; II. Upper Subordinate establishment; III. Lower Subordinate establishment; IV. Office establishment; V. Petty establishment.

It is unnecessary to deal here with the Lower Subordinate, Office, and Petty establishments, since they comprise only servants of inferior grades, such as sub-overseers of works, clerks, watchmen, messengers, and so on.

The salaries of officials in the Engineer and Upper Subordinate establishments are given below.

SCALE OF PAY IN EXECUTIVE BRANCH.

Officials.	Pay per mensem in Rupees.	Officials.	Pay per mensem in Rupees.
Chief Engineers:		Sub-engineers:	
First class	2,500	First grade	400
Second class	2,000	Second grade	300
Third class	1,800	Third grade	250
Superintending Engineers:		Supervisors:	
First class	1,600	First grade	200
Second class	1,400	Second grade	150
Third class	1,250	Overseers:	
Executive Engineers:		First grade	100
First grade	1,000	Second grade	80
Second grade	850	Third grade	60
Third grade	700		
Assistant Engineers:			
First grade	600		
Second grade	500		
Third grade	400		

First appointments to the Engineer establishment are made in England by the Secretary of State for India or in India by the Government of India. The appointments made by the Secretary of State fall either to selected students from the

Royal Indian Engineering College, Cooper's Hill,* or to candidates who have satisfied a Selection Committee appointed by the Secretary of State, and who hold one or another of certain specified degrees, such as the B.Sc. (Engineering) of the Universities of London, Glasgow, Edinburgh, and so on. The Selection Committee of 1905 stated that the subjects which were held to be of most importance for the Public Works Service were:—Pure Mathematics, including a knowledge of the differential and integral calculus; Applied Mathematics; Geometrical and Engineering Drawing; Surveying and Geodesy; Strength of Materials and Theory of Structures; Hydraulics; Heat Engines; Materials used in Construction; Building Construction, wood and metal work, limes and cements, and building with stone, brick, and concrete; Knowledge of the Principles of road-making, water-works, sanitary and railway engineering.

The Committee were further of opinion that all candidates should have had some workshop training.

The appointments made by the Government of India fall

* This College was closed in 1906.

either to Royal Engineer Officer on the Indian establishment or to persons educated at the Civil Engineering Colleges in India. Young officers of the Royal Engineers on being first appointed to the Engineer establishment of the Public Works Department are posted as third or second grade Assistant Engineers. Passed students of the Civil Engineering Colleges of India enter the department as apprentices on Rs. 100 a month, and are promoted after one year, if their work is satisfactory, to be third grade Assistant Engineers.

First appointments in the Upper Subordinate establishment are usually made by the Government of India from the passed students of the Thomason College, Rurki, and from non-commissioned officers and men of the Royal Engineers who may be reported available for employment.

In order to meet the demand for extra supervision which may arise from time to time, as well as to insure that the Public Works establishments be capable of contraction as well as of expansion as the expenditure on works diminishes or increases, the permanent establishments, referred to in the foregoing paragraphs, are supplemented by temporary establishments to such extent as may be necessary from time to time. The powers of Local Governments to sanction such temporary establishments are subject to the following restrictions:—(a) if the cost is wholly chargeable to Imperial,* the pay of any one appointment must not exceed Rs. 250 a month; (b) if the cost is wholly or partly Provincial,* I. where the remuneration does not exceed Rs. 250 a month, the sanction may be for any fixed period, II. where the remuneration exceeds Rs. 250 a month, the sanction cannot be for more than six months. Subject in all cases to the limit laid down in the budget estimate for temporary establishment.

Temporary Establishments.

CLASSIFICATION OF PUBLIC WORKS.

The work of the Public Works Department is covered by two reports annually, one referring to Buildings and Roads, the other to Irrigation. Railway administration is not dealt with in the annual reports of the Public Works Department. An account of Railway matters is given on pages 674–679.

The Buildings and Roads branch of the Public Works Department deals with military works, civil buildings, communications, and miscellaneous public improvements; and the Irrigation

* Explanation of "Imperial" and "Provincial" is given on p. 558 *et seq.*

branch, with major irrigation works and with minor and navigation works.

It is convenient to deal separately with the Reports on Buildings and Roads and those on Irrigation; but, before proceeding to do so, a summary statement may be made of the expenditure on each class of works during the official years 1901-05. Further details of expenditure are given in the section of this chapter headed "Public Works Expenditure" and in Appendix R. The classification in the following table is based upon the nature of the funds from which the expenditure is defrayed.

EXPENDITURE ON PUBLIC WORKS, 1901-05.

(In Rupees.)

Class of Work.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Imperial: *					
Civil works . . .	—	—	—	—	12,965
Military works . .	693,963	643,984	841,200	647,927	563,022
Irrigation	989,617	2,157,866	1,679,834	1,428,715	1,223,088
Provincial: *					
Civil works . . .	8,592,333	7,994,039	8,720,294	9,004,863	9,500,284
Irrigation	1,692,582	1,869,199	1,530,478	1,562,602	1,480,560
Incorporated Local: *					
Civil works . . .	726,328	602,098	632,010	633,369	657,713
Irrigation	4,549	6,501	6,004	3,351	3,375
Contributions: †					
Military works . .	12,031	11,548	61,498	83,441	113,766
Civil works . . .	49,812	137,363	1,240,865	1,362,116	1,746,183
Grand total . . .	12,769,315	12,523,198	14,712,183	15,326,474	15,300,966

WORKS UNDER THE BUILDINGS AND ROADS BRANCH.

The expenditure on Military works is wholly Imperial with the exception of a small sum under the head of "contributions."

Military Works. The expenditure is classed under the heads Works, Establishment, Tools and Plant, and Expenditure in England, the amount against the last item being deducted from the sum of the others in order to give the figure for the actual expenditure in Burma. The chief objects of expenditure are the construction and repair of barracks, the erection of residential quarters for officers, the providing of

* These funds are described on p. 263 et seq.

† Contribution works are defined as works for which the outlay is provided wholly or in part from funds of a public nature, which are not included in the estimates and accounts of the Indian Empire, or from contributions from the public.

water-supply for the troops, and the erection of mess-houses, hospitals, and stables. The Imperial expenditure under each head during the past five years is given below.

IMPERIAL EXPENDITURE ON MILITARY WORKS, 1900-05.

(In Rupees.)

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Works:					
Original	235,400	176,900	376,771	212,815	176,517
Repairs	300,060	297,811	259,149	269,605	249,193
Total	535,460	474,711	635,920	482,420	425,710
Establishment	112,877	108,430	146,263	110,738	92,134
Tools and Plant . . .	7,139	6,916	9,279	6,908	5,728
Barrack Department.	69,403	53,437	50,433	47,861	49,013
Expenditure in Eng- land	-31,816	-570	-695	—	-9,564
Grand total	693,063	643,984	841,200	647,927	563,022

From the foregoing table it is seen that the ratio of the expenditure on establishments to the expenditure on works was 21.08%, 23.04%, 23.00%, 22.95%, and 21.64%, respectively, in each year.

The expenditure on Civil works is drawn only in rare cases from Imperial funds. In the years 1900-01 to 1903-04 no expenditure was incurred from Imperial funds on account of Civil Works. In the year 1904-05 a small item of Rs. 12,966 was expended from Imperial funds in connection with the establishment of two wireless telegraph stations giving communication with the Andaman Islands.

With the exception noted in the previous paragraph the expenditure on Civil Buildings in Burma during the past five years has been incurred under the heads Provincial, Local, and Contribution. The accounts are divided into outlay on original works and on repairs. The outlay represents the construction and repair of hospitals, jails, schools, and other buildings connected with the administration. The outlay on Civil Buildings during the past five years is given in the following table. The figures refer only to works, and do not include the cost of establishment. Establishment charges for Civil works are given in a lump sum for buildings, communications, and miscellaneous public improvements; and they are dealt with on page 668.

PUBLIC WORKS

665

EXPENDITURE ON CIVIL BUILDINGS, 1901-05, EXCLUDING ESTABLISHMENT CHARGES AND THE COST OF TOOLS AND PLANT.

(In Rupees.)

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Provincial:					
Original works . . .	3,616,508	2,301,737	2,390,294	2,176,006	3,430,964
Repairs	615,934	549,501	497,433	573,638	489,367
Total	4,232,442	2,911,238	2,887,727	2,749,644	3,920,331
Local:					
Original works . . .	27,288	20,891	21,448	14,794	60,854
Repairs	2,424	2,301	4,439	2,003	1,761
Total	29,712	23,192	25,887	16,797	62,615
Contributions:					
Original works . . .	10,839	5,613	10,753	31,499	27,333
Repairs	1,401	3,571	547	2,423	1,491
Total	12,240	9,184	11,300	33,922	28,824
Under all heads:					
Original works . . .	3,654,635	2,388,241	2,422,495	2,222,299	3,519,151
Repairs	619,759	555,373	502,419	578,064	492,619
Grand total . . .	4,274,394	2,943,614	2,924,914	2,800,363	4,011,770

When the various portions of Burma came under British rule, the only means of communication were the tidal creeks of the Irrawaddy delta, the rivers and their tributaries, rough jungle paths, and temporary cart-tracks across the fields when once the crops had been reaped and harvested. Even down to 1877, after Pegu had been in British possession for a quarter of a century, there were exceedingly few roads, and none of these were complete with bridges and metal. The first real impetus towards the construction and the proper maintenance of fairly good metalled roads was felt about the time of the opening of the Irrawaddy Valley Railway from Rangoon to Prome in 1877. The necessity for feeder-roads became then, of course, at once apparent. The growing wealth of the agricultural population and the rapid extension of permanent rice cultivation throughout all the central portions of Lower Burma necessitated the construction of roads to enable the surplus grain of land-locked areas to be brought within easy reach of the rice mills at Rangoon, Moulmein, and Bassein. The impulse thus given to road construction has never been relaxed. (Nisbet, *Burma under British Rule—and Before*, Vol. I. pp. 239-241.)

At the end of the official year 1904-05 there were open to use in Burma 1,516 miles of metalled roads, 3,170 miles of unmetalled roads, and 2,799 miles of other roads, a total of 7,486 miles of open communications by land, exclusive of railways.

The expenditure on communications, exclusive of cost of establishment, during the past five years is shown below.

EXPENDITURE ON COMMUNICATIONS, 1901-05, EXCLUDING ESTABLISHMENT CHARGES AND THE COST OF TOOLS AND PLANT.

(IN RUPEES.)

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Provincial:					
Original works . .	1,250,073	1,729,402	1,982,010	2,362,924	1,918,921
Repairs	1,750,491	1,798,992	1,840,954	1,838,108	1,753,361
Total	3,000,564	3,528,394	3,822,964	4,201,032	3,672,282
Local:					
Original works . .	253,339	140,257	163,137	134,394	105,216
Repairs	171,316	184,936	226,027	221,755	197,822
Total	424,655	325,193	379,164	356,149	303,038
Contributions:					
Original works . .	11,717	28,722	4,185	439	33,966
Repairs	763	773	730	1,380	1,275
Total	12,480	29,495	4,915	1,819	35,241
Under all heads:					
Original works . .	1,515,129	1,898,381	2,089,332	2,497,727	2,058,097
Repairs	1,922,570	1,984,701	2,067,711	2,061,243	1,952,437
Grand total . .	3,437,699	3,883,082	4,157,043	4,558,970	4,010,554

It will be observed that about the same sum of money is expended each year in the construction of new roads and in the upkeep of those already in use. Of the total sum expended on communications a small proportion (amounting in 1904-05 to Rs. 75,193) goes for the upkeep of ferries, the planting of trees along roads, and for the construction and repair of rest-houses for travellers and inspection bungalows for Public Works Department officials.

In a country like Burma, where outside the principal towns there is practically no accommodation for travellers, the Government finds it necessary to erect and maintain rest-houses for the use of its officials when on tour. These rest-houses may be occupied by unofficial travellers on the payment of a small sum for the use of rooms and a small fixed charge for such simple meals as are served by the keeper in charge.

The number of miles of new road opened in 1904-05 was 439, made up of 73 miles of metalled and 366 miles of unmetalled road. Neither in the Administration Report of the Public Works Department nor in the Reports on the Administration of Burma, for years prior to 1904-05, is any statement given of the number of miles of new road opened each year; and in no Report that I have seen is there any account of the cost of making various classes of roads in Burma,—a matter of great interest to the student of comparative colonisation.

Miscellaneous Public Improvements comprise general town improvements, the construction and repair of markets, the

Miscellaneous Public Improvements. making and maintenance of streets, water-supply schemes, sewage and drainage, and a few small items. The greater

part of the expenditure under this general head is incurred from Contributions; that is to say, in connection with works the cost of which falls on funds other than Imperial, Provincial, and Incorporated Local, but for which the services of the Public Works Department are engaged. The most important works of this character undertaken in recent years are the Hlawga Water-supply Scheme, which is intended to supply the town of Rangoon by a large storage reservoir at Hlawga and a 42-inch iron main, and the Moulmein Water-supply Scheme.

EXPENDITURE ON MISCELLANEOUS PUBLIC IMPROVEMENTS, 1901-05,
EXCLUDING ESTABLISHMENT CHARGES AND THE COST OF TOOLS
AND PLANT.

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Provincial:	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
Original works	208,002	245,175	433,689	368,128	390,187
Repairs	38,870	67,296	54,299	54,973	117,429
Total	246,872	312,471	487,988	423,101	417,616
Local:					
Original works	95,032	95,750	94,334	83,631	107,957
Repairs	43,394	41,613	58,849	54,735	58,200
Total	138,426	137,363	153,183	138,366	166,157
Contributions:					
Original works	13,730	50,761	1,106,276	1,152,092	1,592,805
Repairs	5,546	9,732	5,726	9,482	2,697
Total	19,276	60,493	1,112,002	1,161,574	1,595,502
Under all heads					
Original works	316,764	391,686	1,634,299	1,603,851	2,090,949
Repairs	87,810	118,641	118,874	119,190	178,326
Grand total	404,574	510,327	1,753,173	1,723,041	2,179,275

The cost of establishment, tools, and plant is not shown separately under the heads Civil Buildings, Communications, and Miscellaneous Public Improvements; and the ratio which these classes of expenditure bear to the outlay on actual works can only be estimated on works as a whole. The facts are shown in the following table for all works under Provincial, Incorporated Local, and Contributions.

EXPENDITURE ON ESTABLISHMENT, TOOLS, AND PLANT, 1901-05.
(IN RUPEES.)

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Provincial Civil Works:					
Establishment	1,012,072	1,093,480	1,170,001	1,355,652	1,414,598
Tools and Plant	86,251	152,291	164,573	660,040	125,851
Local Civil Works:					
Establishment	124,718	108,564	115,816	113,833	117,673
Tools and Plant	8,817	7,786	7,960	8,254	8,235
Contributions, Military Works:					
Establishment	456	1,875	1,170	14,206	21,914
Tools and Plant	30	122	76	926	1,430
Contributions, Civil Works:					
Establishment	5,460	14,776	64,746	88,679	107,722
Tools and Plant	356	23,415	47,902	76,122	21,596
Under all heads:					
Establishment	1,142,706	1,218,695	1,351,733	1,572,370	1,661,909
Tools and Plant	95,454	183,624	220,511	745,342	166,627

From the figures now before us in the tables in this section of the chapter it is possible to divide the expenditure on Public Works (excluding irrigation) in Burma during the past five years under the various objects of outlay; that is to say, we may express the proportion which actual works, salaries, tools, and plant have borne in each year to the whole expenditure. The result is important, for it discloses the internal economy of the Public Works Department, and shows what the public is receiving in return for its support of one of the principal departments of the Government. The facts are disclosed in the following table, which includes all expenditure under the stated heads, on all works, Civil and Military, under each class,—Imperial, Provincial, Incorporated, Local, and Contributions.

PUBLIC WORKS

669

GENERAL ANALYSIS OF PUBLIC WORKS EXPENDITURE IN THE
BUILDINGS AND ROADS BRANCH, 1901-05.

	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1900-01 to 1904-05.
<i>Outlay on</i>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Works	8,663,672	7,821,345	9,531,302	9,633,103	10,728,136	46,377,558
Establishment .	1,255,583	1,328,125	1,497,966	1,683,108	1,756,438	7,521,230
Tools and Plant,	102,593	190,440	229,790	732,250	172,502	1,447,575
Total . . .	10,021,848	9,339,910	11,259,058	12,068,461	12,657,076	55,346,363
<i>Proportion on</i>						
Works	86.44	83.74	84.65	79.82	84.75	83.79
Establishment .	12.52	14.21	13.30	13.94	13.87	13.58
Tools and Plant,	1.02	2.03	2.04	6.23	1.36	2.61
Forward . . .	.02	.02	.01	.01	.02	.02
Total . . .	100.00	100.00	100.00	100.00	100.00	100.00
<i>Ratio of outlay on Establishment to outlay on Works . . .</i>	14.49 to 100	16.98 to 100	15.71 to 100	17.47 to 100	16.37 to 100	16.21 to 100

IRRIGATION WORKS, GENERAL.

Irrigation Works in Burma fall under two main heads, Major Works, and Minor Works and Navigation. Both the cost

of construction and the working expenses of Major Irrigation works are Imperial.

Major and Minor Irrigation Works. Practically, the whole expenditure on account of Minor Works and Navigation is Provincial, though a small proportion falls on Local funds. This proportion is so small that it need not be further considered, and in the rest of this section it will be treated as Provincial.* Before dealing with Imperial and Provincial Irrigation Works in detail, a summary may be given of Irrigation expenditure during the past five years. The figures are taken from the *Finance*

and *Revenue Accounts of the Government of India*, and show the capital expenditure as well as the expenditure charged to revenue account. The total capital expenditure on Irrigation works up to the year 1904-05 is stated on page 672.

*Out of a total expenditure of Rs. 1,421,461 on Minor Works and Navigation in 1904-05, only Rs. 10,900 was classed as Local.

EXPENDITURE ON IRRIGATION, 1901-05.

(IN RUPEES.)

Class of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
<i>Imperial:</i>					
Capital outlay on Major Works . .	989,618	1,257,896	1,649,523	1,336,688	1,147,787
Working expenses of Major Works .	—	—	30,312	92,027	75,300
<i>Provincial:</i>					
Minor Works and Navigation . . .	1,697,616	1,881,477	1,537,448	1,575,283	1,491,460
Total expenditure charged against Capital and Revenue	2,687,234	3,139,343	3,217,283	3,003,998	2,714,549

IMPERIAL IRRIGATION WORKS.

There are three Imperial Irrigation Works in Burma,—the Mandalay Canal, the Shwebo Canal, and the Mön Canals. These works are entirely Imperial, the cost of construction and maintenance falling on the Imperial revenue and capital accounts, and the revenue derived from them being Imperial revenue.

The Mandalay Canal lies in the Mandalay District of Upper Burma. The work was commenced in December, 1896. The

The Mandalay Canal. main canal, 39.4 miles in length, was completed in 1901, and was formally opened on January 7, 1902. The irrigation distributaries, 98.4 miles in length, were completed in 1905. The Mandalay Canal project as completed commands 80,000 acres of irrigable land, and of this area 43,719 were already under irrigation at the end of 1904-05. The total capital expenditure on this project up to the end of 1904-05—that is, practically from the commencement to the completion of the whole work—was Rs. 6,159,226, including interest on capital during construction. The work is classed as a productive work; that is to say, one which is expected to pay the cost of upkeep as well as the interest on capital outlay. The revenue to be derived from the canal falls under two heads, the charge to occupiers of land irrigated by the canal for the water supplied, averaging about Rs. 5 per acre, and the increase in the assess-

ment of ordinary land revenue due to the increased value of crops from irrigation.

The Shwebo Canal lies in the Shwebo District of Upper Burma. Work was commenced during the official year 1900-01. The

The Shwebo Canal. project consists of 27.4 miles of main canal, 49.7 miles of branch canals, and 193 miles of irrigation distributaries. The estimated cost of the project, including interest on capital during construction, is Rs. 5,380,654. Up to the end of 1904-05 the total sum expended was Rs. 4,181,627; and the amount of completed work was 27.1 miles of main canal, 44.7 miles of branch canals, and 83 miles of irrigation distributaries. The area of irrigated land to be commanded by the project, when completed, is 150,000 acres. The Shwebo Canal is classed as a productive work. At the present time Upper Burma does not grow enough rice for the support of its population, and a large importation of rice is made annually from Lower Burma. When the area commanded by the Shwebo Canal comes under irrigation, it is estimated that it will grow more than sufficient for the needs of the population of Upper Burma, and that in good years there will be an export to Lower Burma for shipment abroad.

The Mon Canals are situated in the Minbu District of Upper Burma. There are two canals, one on the north and one on the south side of the Môn River. Work

The Môn Canals. was commenced in the official year 1904-05. The project consists of 53 miles of main canals and 57 miles of distributaries. The estimated cost of the project, including interest on capital during construction, is Rs. 4,876,037. Up to the end of 1904-05 the amount expended was Rs. 268,791; and no part of the main canals or distributaries was completed. The area of irrigable land to be commanded by the project when completed is 78,575 acres. The work is classed as a productive scheme.

The following table shows the total capital expenditure on Imperial Irrigation works in Burma up to the end of the

Expenditure on Imperial Irrigation Works.	official year 1904-05. The figures are taken from the <i>Administration Report of the Public Works Department, Burma, Irrigation</i> , for the year 1904-05, and include all capital expenditure, whether charged to capital account or revenue account. No account is taken here of working expenses, since the only work in regard to which working expenses have been incurred is the Mandalay Canal, for which
---	--

the working expenses to the end of 1904-05 were less than Rs. 250,000.

CAPITAL EXPENDITURE ON IMPERIAL IRRIGATION WORKS IN
BURMA TO END OF 1904-05.

(IN RUPEES.)

Class of Expenditure.	Mandalay Canal.	Shwaha Canal.	Mén Canals.	Total.
<i>Direct Charges:</i>				
Works	4,232,875	3,188,867	151,927	7,573,669
Establishment	770,552	461,751	74,131	1,306,434
Tools and Plant	95,642	175,590	18,543	289,775
Suspense	731	5,056	5,727	11,514
Gross total	5,099,800	3,831,264	250,328	9,181,392
Less receipts on Capital Account	9,738	10,463	307	20,508
Net total Direct Charges . .	5,090,062	3,820,801	250,021	9,160,884
Indirect Charges	110,350	64,645	10,378	185,373
Interest during Construction . .	958,814	296,181	8,392	1,263,387
Total Capital Outlay less receipts on Capital Account .	6,159,226	4,181,627	268,791	10,609,644

The whole of the above expenditure was charged against capital account, except Rs. 38,782, which was charged against revenue. It is seen from the above table that the ratio of expenditure on establishment to expenditure on works up to the end of 1904-05 was 17.24 to 100.

MINOR WORKS AND NAVIGATION.

Under Minor Works and Navigation are included minor irrigation works, irrigation tanks, navigation canals, and embankment works. A distinction is made in the accounts between works for which capital and revenue accounts are kept and works for which only revenue accounts are kept. The only minor works for which capital accounts are kept are the Irrawaddy Embankments, including the Eastern and Western series and the Thongwa Island Embankment. The object of the embankments is the protection of cultivation areas from river floods. The total capital expenditure on embankments, for which capital accounts are kept, to the end of 1904-05, is Rs. 3,339,900.

The following table shows the annual revenue and expenditure on all Minor Works and Navigation Works up to the end of 1904-05, including those for which capital accounts are kept. It will be noted that the Government derives a considerable annual revenue from this class of works. The revenue is derived from receipts, variously classed, on account of irrigation, from canal tolls on navigation canals, and from some minor sources. The expenditure is incurred on account of revenue collection and for working expenses.

REVENUE AND EXPENDITURE ON MINOR WORKS AND NAVIGATION
WORKS TO THE END OF 1904-05 (EXCLUDING CAPITAL
EXPENDITURE).

(IN RUPEES.)

	To End of 1901-02.	During 1902-03.	During 1903-04.	During 1904-05.	To End of 1904-05.
<i>Gross Revenue from</i>					
Works for which Capital Accounts are kept	16,940,779	1,180,138	1,204,820	1,217,711	20,543,448
Works for which Revenue Accounts only are kept . .	18,002,053	753,907	1,338,760	1,443,146	21,568,626
Gross total	34,942,832	1,934,045	2,543,580	2,660,857	42,112,074
<i>Expenditure on</i>					
Works for which Capital Accounts are kept	4,587,913	214,393	275,867	224,891	5,434,028
Works for which Revenue Accounts only are kept . .	19,816,703	1,244,273	1,203,540	1,180,438	23,444,954
Total	24,404,616	1,458,666	1,479,407	1,405,329	28,878,982
<i>Net Revenue from</i>					
Works on which Capital Accounts are kept	12,352,866	965,745	928,953	992,820	15,109,420
Works on which Revenue Accounts only are kept . .	-1,814,630	-490,369	135,220	262,708	-1,876,328
Total Net Revenue . . .	10,538,236	475,379	1,064,173	1,255,528	13,233,092

It will be seen from the above table that up to the end of 1904-05 there has been a net profit of Rs. 15,109,420 on Minor Works, for which capital accounts are kept, and a net loss of Rs. 1,876,328 on Minor Works and Navigation Works, for which revenue accounts only are kept, the net gain on account of Minor Works and Navigation Works of all classes from the

commencement of such works down to the end of 1904-05 being Rs. 13,233,092. If capital expenditure be deducted from the net revenue, as shown above, the net gain to date, after allowing for all outlay on capital and working expenses, is Rs. 9,893,192.

It is important to note that these figures of receipts on account of Minor Works and Navigation represent the revenue, direct and indirect, as shown in the administrative accounts of the Public Works Department. In the general financial accounts of the Province these receipts do not appear against Minor Works and Navigation (except a small sum for direct receipts), but against the various sub-heads of Land Revenue. The classification adopted in the Reports of the Public Works Department is intended to exhibit the internal economy of the Irrigation Branch of the Department; in other words, to show what return the Province receives on account of its outlay on Minor Works and Navigation.

THE BURMA RAILWAYS, HISTORICAL.

The following brief historical survey of railways in Burma is condensed from Dr. Nisbet's *Burma under British Rule—and Before*:—

The railways in Burma are all of metre gauge. They consist of two main trunk lines of very unequal length, both of which were originally State railways. That constructed first and opened to traffic in May, 1877, the *Irrawaddy Valley State Railway*, runs from Rangoon, the capital and the chief seaport of Burma, situated near the mouth of the Irrawaddy river, northwards for 163 miles to Prome, an important town on the left bank of the Irrawaddy. It was first projected in 1868, but the estimates were not prepared till 1873. The first sod was turned in July, 1874, large numbers of famine immigrants from Bengal being employed on the earthwork.

Throughout most of its length this railway follows the military road constructed at the close of the second Burmese war (1852-53) to connect Rangoon with the old frontier station of Thayetmyo, forty-five miles north of Prome. This line passes through rich rice-fields, and has been a very remunerative investment. Apart from the strategical objects which were of considerable influence in determining the Government of India on its construction, it has contributed in a very marked degree to the spread of rice cultivation and the increase of revenue throughout the Hanthawaddy, Tharrawaddy, and Prome districts.

After the completion of this first short line, the survey was put in hand of a similar line of about equal length (166 miles) running first north by east through the Pegu and Shwegyin districts, and then due north to Toungoo, the other old frontier military station on the Sittang river. The prospect of

this *Sittang Valley State Railway*, opened in 1884, paying as well as the line on the Prome side, was not very promising at first; but strategical reasons were far stronger in this than in the previous case. From Rangoon to Prome and Thayetmyo there had always been good river communication by means of the Irrawaddy Flotilla Company's steamers, whereas the troops in Toungoo were much more out of touch with the central military authorities. Toungoo could, it is true, be reached either by land or water. But the land route involved marching for more than 160 miles over a very bad road crossed by several large streams, some of the largest of which were neither bridged nor served by ferries. Moreover, only the first fifty miles or so of the road were metalled, and very badly metalled too, so that this route was only practicable between the months of November and April.

The river communication was equally bad. The passage from the Pegu river to the Sittang, and consequently the ascent of the latter, could only be made during the fortnightly spring tides, at which periods the strong bore rushing up the winefiller-shaped mouth of the Sittang river was sometimes dangerous. The ascent by river from Rangoon usually took from ten to twenty days, in great discomfort, and it was all but impracticable during the flood season lasting from June to October.

All movements of trade between Rangoon and the Sittang river were likewise limited to the high tides recurring fortnightly, as at other times the Kyásu creek, leading from the Pegu river across into the Sittang, was blocked for want of water. Such was the rather unpleasant state of affairs until the opening of the *Sittang Valley State Railway* in 1884.

During 1887-88 the Irrawaddy and Sittang lines, extending over 333 miles, which had cost over 289 lacs of rupees (£1,926,666), made net earnings of nearly 15 lacs of rupees (£100,000) giving a return of 5.11 per cent. on the capital.

Permanent cultivation near the newer line of railway soon began to extend, though nothing like so rapidly as had been the case in the less thinly populated tracts traversed by the Prome line. The Sittang railway had, however, this great advantage, that it was capable of extension northwards to Mandalay whenever circumstances might render such a scheme feasible.

The annexation of Upper Burma on January 1, 1886, and the military operations entailed thereafter in the occupation and the pacification of the new territories, necessitated the extension of the Sittang line to Mandalay. The work of survey and of construction began towards the close of 1886, taking place simultaneously from Mandalay southwards for forty miles, and from Toungoo northwards for sixty miles; but in the intervening 120 miles some delay occurred in making a commencement, as the work had to be carried on in tracts that were seriously disturbed by predatory bands of dacoits or armed robbers. It is perhaps the finest achievement of our civilisation in Burma that this extension, measuring 220 miles from Toungoo to Mandalay, was opened to traffic early in 1889, within three and a quarter years of the annexation of Upper Burma. The chief credit of this great work is mainly due to Sir Charles Bernard, the Chief Commissioner of Burma; for it was really through his personal insistence that the extension scheme was somewhat reluctantly approved by the Government of India and recom-

mended to the Secretary of State. This extension skirted the Shan hills, passing within fifteen to twenty miles of the mouths of the passes through which the caravans from the southern States reach the plains, and opening up a land-locked tract inaccessible by any navigable streams. Work on this line provided labour for large numbers of people, and materially assisted the pacification of these eastern districts which were for some time among the most turbulent in the province.

One of the results of this through railway communication between the moist tracks of Lower Burma and the central dry zone of Upper Burma—in which, owing mainly to excessive clearance of the original forest covering, the humidity of the atmosphere is very low and the storage capacity of the soil for retaining moisture has been ruined, while the surface soil is easily eroded and washed away during heavy rainfall—has been that in years of scarcity, such as have been of frequent recurrence recently, large supplies of rice and other foodstuffs can be poured into the afflicted districts. At the same time the people can easily, if they like, be transferred by rail to the vicinity of tracts not far distant in Lower Burma, where danger from drought does not exist, and where good land can still readily be obtained from Government for clearance and permanent occupation on uncommonly easy terms.

On the completion of the line to Mandalay, a survey was almost immediately put in hand for facilitating military operations and opening up the new province by extending the railway system northwards towards Shwebo, and then beyond that to Katha, to Mogaung, and to the upper portion of the Irrawaddy river, about 100 miles north of Bhamo. The Myohaung ("ancient capital") station, a few miles south of Mandalay, was chosen as the most convenient point of junction, and from this a short branch was thrown out westwards to Amarapura. Here the Irrawaddy has now to be crossed in large and powerful ferry steamers to the town of Sagaing (though it will probably soon be bridged at an estimated cost of about £200,000), whence the *Mu Valley State Railway* was constructed running northwards through the Sagaing, Shwebo, Katha, and Bhamo districts to Mogaung and Myitkyina.

This railway was opened to traffic in sections, first of all to Shwebo in 1891, then to Wuntho in 1892, to Katha on the Irrawaddy (which is connected with the main line by a short branch) in 1895, to Mogaung in 1897, and finally to Myitkyina during the autumn of 1898. This Mu Valley line only commenced to pay in 1900, but its prospects are good.

After the opening of the Mu Valley Railway, the various lines were amalgamated and called the *Burma State Railways*; but this name was altered to the *Burma Railways System* in 1896 when the Burma Railways Company took over the management of the lines from the Government.

THE WORKING OF THE BURMA RAILWAYS.

The length of Burma Railways open to traffic at the end of the official year 1904-05 is shown in the following table. The line is 3' 3½" gauge throughout, is laid partly with 50 lb. and partly with 41½ lb. rails, and is ballasted either with shingle

or broken stone. The sleepers are of local hard woods, teak, *pyinma*, or *pyinkado*, the last-named predominating.

LENGTH OF RAILWAYS OPEN ON 31 MARCH, 1905.

(IN MILES.)

Section.	Main Line.	Branches.	Total.
Irrawaddy Section	161.00	—	161.00
Sittang Section	166.00	0.00	175.00
Mandalay Section	220.00	72.60	292.60
Mu Valley Section	331.29	91.46	422.75
Mandalay-Kunlong Section	177.84	—	177.84
Bassein-Henzada-Letpadan Section	84.71	26.25	110.96
Total Open Line	1,140.84	199.31	1,340.15

The railways were taken over by the Burma Railway Company in 1896, at which time 886 miles were open to traffic.

The Railway
Company's Contract.

The contract under which the Company works the railways is dated March 9, 1897. Its general terms are that the Government guarantees interest on the Company's share capital at the rate of 2½ per cent. per annum, and provides the land needed for the railway free of charge. The Government may determine the contract at any time, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. The Government may also determine the contract on the 31st of December, 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter. The Company has no power to determine the contract.

After deducting working expenses (which may include any single item of capital expenditure not exceeding Rupees 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of open line to be made half-yearly to the Government for supervision), the net receipts

in each half-year are to be applied in payment to Government of:—(1) the equivalent of the interest paid for the half-year on any debentures issued by the Company; (2) the equivalent of the guaranteed interest at $2\frac{1}{2}$ per cent. per annum on the Company's capital of £2,000,000 (Rs. 30,000,000), and of the interest payable on any additional share capital raised by the Company; (3) the equivalent of interest at $2\frac{1}{2}$ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by the Government.

After the payment of the interest referred to above, any surplus which may remain unpaid in a year ending on the 30th of June is to be divided between the Government and the Company, in the proportion of four-fifths to the former and one-fifth to the latter.

The following table shows the principal facts of interest in regard to the finances of the Burma Railways:—

FINANCES OF THE BURMA RAILWAYS, 1900-04.

(In Rupees.)

	Calendar Year 1900.	Calendar Year 1901.	Calendar Year 1902.	Calendar Year 1903.	Calendar Year 1904.
Capital outlay to the end of year	113,396,635	119,922,468	127,023,590	130,130,277	133,828,678
Gross earnings in year .	11,029,947	11,885,329	12,502,671	13,614,478	15,102,418
Net earnings in year .	4,894,824	4,989,656	5,272,683	5,219,322	6,570,760
Per cent. of net earnings on capital outlay . . .	4.43	4.16	4.05	4.01	4.92
Interest charges during the year	3,849,026	4,041,108	4,394,823	4,406,500	4,471,268
Net earnings less interest charges	1,045,798	948,548	877,860	812,822	2,099,492
Company's share of final net earnings . .	347,606	442,439	469,365	432,246	592,997
Government share of final net earnings . .	698,192	506,109	408,495	380,576	1,506,495
Earnings per mile per week	195	197	203	197	216
Proportion of working expenses to earnings .	55.62 to 100	58.02 to 100	57.83 to 100	61.66 to 100	56.49 to 100

The net result of railway enterprise in Burma up to the end of 1904—that is to say, during twenty-six years from 1879—is that there has been a loss to the Government of Rs. 342,018. This loss has, however, been converted into a profit during 1905; and, now that the line is on a permanent paying basis,

there will be a considerable profit each year to the Government. In the mean time many millions of rupees have been expended in the country on railway projects, and employment has been afforded to thousands of people. If the great advantage which the railways have been to trade be taken into account as well as the increased general revenue due to the part which the railways have played in the economic development of the country, there can be no doubt that the railways have been of immense benefit to the Province.

CHAPTER XVI.

MUNICIPAL ADMINISTRATION

REFERENCES.

- The Burma Municipal Manual, containing the Burma Municipal Act, 1898, as amended by Burma Act III. of 1902 and Burma Act II. of 1903, and the General Rules, Notifications, and Circulars issued thereunder. Corrected up to the 16th March 1904. Rangoon, Govt. Press, 1904, pp. 8 + 265 + xvi. [In using this work, I have had before me correction slips issued down to May, 1905.]
- The Upper Burma Municipal Manual, containing the Upper Burma Municipal Regulation, 1887, and the General Rules, Notifications, and Circulars issued thereunder. Corrected up to the 1st of October 1897. Rangoon, Govt. Press, 1897, pp. 121 + ii + v. [In using this work, I have had before me correction slips issued down to December, 1903.]
- Resolution reviewing the Reports on the Working of Municipalities in Burma. Rangoon, Govt. Press. Annual.

GENERAL REVIEW OF MUNICIPAL AFFAIRS.

The first Act providing for municipal government in Burma was passed in 1874; and it was immediately applied to several of the larger towns of the Province. Since that time the number of municipalities has steadily increased, and in 1904-05 there were in the Province 41 municipalities, of which 28 were in Lower and 13 were in Upper Burma. All the municipalities in Burma are administered under the Burma Municipal Act, the few which were formerly under the Upper Burma Municipal Regulation having been brought under the Act in 1905-06. The *Resolution Reviewing the Reports on the Working of Municipalities in Burma*, which is published annually, deals with all the municipalities except Rangoon. The opening paragraph of the Resolution each year states that the *Report on the Administration of the Rangoon Municipality* is reviewed separately; but I have been unable, despite repeated efforts, to obtain copies of this separate review or of the Report itself. The difference between Rangoon and the other municipalities of the Province is in the main one of size only, the figures for revenue and expenditure being larger, and the capital city, owing to its wealth, enjoying larger borrowing powers than other municipalities.

As Rangoon, in common with the other municipalities, is administered under the Burma Municipal Act, it presents no administrative peculiarities which call for special comment; and,

in the absence of the annual reports dealing with its affairs, I have been able to secure all the more essential facts of its administration from the general Administration Report of the Province and from the volume *Judicial and Administrative Statistics of British India*, published annually by the Government of India.

The constitution, organisation and general powers of the municipalities of Burma are concisely described in the abstract of the Burma Municipal Act of 1898 on pages 684-706.

From the figures given in the statistical section which follows the abstract of the Act the following brief summary is made.

Number and Population of Municipalities. There were in Burma in the official year 1904-05 forty-one municipalities with an aggregate population within municipal boundaries of about 900,000 persons. Of this municipal population about 240,000 were in the single municipality of Rangoon, the capital of the Province, the remaining 660,000 being distributed over the other forty municipalities.

There were 537 members of municipal committees, 25 in Rangoon and 512 in the other municipalities. Of these members

Municipal Committees. 159 held their seats *ex officio*, 267 were nominated by the Government and 111 were elected by the voters of the various municipalities. The qualifications for voters vary in different municipalities, the highest requirement being the possession of immovable property within the municipality to the value of Rs. 500, or the payment of Rs. 10 as monthly rental, or Rs. 5 as yearly rates and taxes, the lowest requirement being, under the above heads, Rs. 100, Rs. 4, or Rs. 3, respectively. The qualifications for a candidate for election to a municipal committee vary in different municipalities. The highest requirement is the possession of immovable property within the municipality to the value of Rs. 3,000, or the payment of a monthly rental of Rs. 25, or the payment of Rs. 30 yearly as rates and taxes, the lowest requirement being, under the above heads, Rs. 500, Rs. 8, or Rs. 10, respectively. The elective system is, however, in force in only nine municipalities, including Rangoon. In other municipalities all the members of committee are either appointed by the Government or hold their seats *ex officio*. Special election rules are in force in Rangoon and in Mandalay. Of the 537 members of committees in the Province 188 were Government officials and 349 were non-officials, 379 were Natives, and 158 were Europeans. Statistics in regard to the number and population of municipalities are given on page 707.

The opening balance to the credit of the municipalities in the official year 1904-05 was Rs. 2,157,401, of which Rangoon represented Rs. 1,158,180; the total ordinary income was Rs. 5,050,590, of which Rangoon represented Rs. 2,430,088; the total ordinary expenditure was Rs. 6,850,032, of which Rangoon represented Rs. 3,855,871. Part of the ordinary expenditure of Rangoon was, however, charged against loan account, and not against revenue. The ordinary expenditure of Rangoon against revenue account was Rs. 2,477,234.

The total income under the head Extraordinary, Debt, Loans, was Rs. 2,032,779, of which Rangoon represented Rs. 1,705,568; and the expenditure under this head was Rs. 789,623, of which Rangoon represented Rs. 444,350, excluding Rangoon ordinary expenditure charged to loan account, which is included in the total for ordinary expenditure given above.

The net result of the finances of the municipalities during 1904-05, including all items, whether ordinary, extraordinary, debt, or loan, was an opening balance of Rs. 2,157,401; a revenue of Rs. 7,083,369; an expenditure of Rs. 7,639,655; and a closing balance of Rs. 1,601,115.

The municipality of Rangoon had, on 31 March, 1906, loans outstanding to the total amount of Rs. 11,394,000. Of this

Municipal Debt. sum Rs. 9,594,000 was a charge upon the general municipal fund, and Rs. 1,800,000 was a charge against the reclamation fund. As against the general fund loans, the municipality had a sinking fund balance of Rs. 585,900 and a sum of Rs. 228,821 outstanding as recoverable advances. The net amount of debt, therefore, was Rs. 8,779,279.

In regard to the minor municipalities no statement of outstanding debt on account of loans received from the Government and loans raised in the open market is given in the *Resolution reviewing the Report on the Working of Municipalities in Burma*, or in the general Administration Report of the Province, or in the *Finance and Revenue Accounts of the Government of India*, though the last-named publication contains a table showing the debt outstanding on account of loans from the Government. The Resolution referred to above gives each year a statement of loans raised, and from this it appears that during the five years ending 31 March, 1905, the municipalities of Burma, other than Rangoon, borrowed a total sum of Rs. 1,958,045. Of this sum Moulmein borrowed Rs. 983,045, and Mandalay Rs. 723,000 in the open market; and Prome Rs. 150,000, Myaungmya

Rs. 45,000, Ma-ubin Rs. 20,000, Henzada Rs. 30,000, and Toungoo Rs. 7,000 from the Government. The other minor municipalities raised no loans during the past five years.

The incidence of taxation per head of population, averaged for all municipalities except Rangoon, was Rs. 1.27 in 1900-01; Rs.

Incidence of Taxation. 1.36 in 1901-02; Rs. 1.42 in 1902-03; Rs. 1.64 in 1903-04; and Rs. 1.62 in 1904-05. For Rangoon the figures were Rs. 5.27; 5.84; 6.01; and 6.52, respectively. For 1904-05 the figures for Rangoon cannot be given, as I have been unable to find any official statement of the population of the municipality in that year. Taxation is here taken to mean municipal rates and taxes, and does not include receipts from sources other than taxation proper, such as fees and revenue from markets and slaughter-houses, licenses, rents, and so on.

The incidence of total ordinary income—that is, receipts from taxation and all other sources except loans and some small items under “Extraordinary”—was for the five years ending 31 March, 1905, for all municipalities except Rangoon, an average per head of population of Rs. 3.40; 3.43; 3.72; 3.83; 3.94. For Rangoon the figures were, for the four years ending 31 March, 1904, Rs. 10.38; 10.32; 11.14; 10.86.

THE BURMA MUNICIPAL ACT, 1898.

The Burma Municipal Act of 1898 consists of ten chapters, dealing respectively with preliminary matters (title, extent, date of commencement, and definitions), the Constitution of Municipalities, the Organisation of Municipal Committees, Taxation, Funds and Property, Powers for Sanitary and other Purposes, Offences affecting the Public Health, Safety, and Convenience, Control, Supplemental matters (criminal procedure, rules, bye-laws, public notices, powers to except Municipalities from the provisions of the Act, the recovery of money claimable by Municipal Committees, and Miscellaneous minor points) and Small Towns.

Chapters II., III., and VIII., relating to the Constitution of Municipalities, the Organisation of Municipal Committees, and the general control of Municipalities are reprinted here in full, some explanatory notes being reproduced, others omitted; and the rest of the Act is summarised.

In the following abstract the summarised sections are placed within square brackets; the reprinted portions are reproduced *verbatim* from the Act.

SUMMARY OF THE BURMA MUNICIPAL ACT, 1898.

CHAPTER I.

PRELIMINARY.

[Title, extent of application, commencement, and definitions. The Act extends to the whole of Burma, including the Shan States.]

CHAPTER II.

CONSTITUTION OF MUNICIPALITIES.

3. (1) The Local Government may, by notification and by such other means as it may determine, signify its intention (a) to declare any town, or any group of towns in the immediate neighbourhood of one another, a municipality under this Act; (b) to include within a municipality any local area in the vicinity of the same; (c) exclude from a municipality any local area comprised therein; or (d) to withdraw the whole area comprised in any municipality from the operation of this Act:

Proposal to create, alter the Limits of, or abolish Municipality.

Provided that, when any part of a local area affected by any such notification is a military cantonment or part of a military cantonment, such notification shall not be published without the previous consent of the Governor-General in Council.

(2) Every notification under this section shall define the limits of the local area proposed to be affected thereby, and may include within the limits of any municipality or proposed municipality any railway station, village, building or land in the vicinity thereof.

4. (1) Any inhabitant of any part of a local area defined in a notification published under section 3 and proposed to be affected thereby may, if he objects to anything therein contained, submit his objection in writing to the Local Government within six weeks from the date of the publication of such notification, and the Local Government shall take his objection into consideration.

Creation, Alteration of Limits, or Abolition of Municipality.

(2) When six weeks from the date of the publication of such notification have expired, the Local Government may, by a further notification, (a) declare the local area or any specified part thereof to be a municipality under this Act, or (b) include the local area or any part thereof in the municipality or exclude it therefrom, or (c) withdraw the whole area comprised in the municipality from the operation of this Act, as the case may be.

5. (1) All municipalities heretofore established under the Burma Municipal Act, 1884, and the Municipality of Mandalay established under the Upper Burma Municipal Regulation, 1887, shall be deemed to be municipalities under this Act. (2) The Local Government may, by notification, direct that this Act shall apply to any other municipality established under the Upper Burma Municipal Regulation.

Application of Act to Existing Municipalities.

(3) The president, vice-president and members of the committee of every municipality mentioned in sub-section (1), or in a notification under sub-section (2), in office at the time when this Act applies to that municipality, shall continue in office as such president, vice-president and members respectively under this Act until the time or respective times when they would respectively have vacated their offices if this Act had not been passed or if such notification had not been issued.

6. (1) When a local area is included in a municipality under section 4, all rules and bye-laws made, orders, directions and notices issued, and powers

**Effect of Including or
Excluding Local Area
in or from Municipality.**

conferred and in force throughout the municipality at the time when the local area is so included, shall apply thereto unless the Local Government shall, in and by the notification

directing such inclusion, otherwise direct.

(2) When a local area is excluded from a municipality under section 4,

(a) this Act and all rules and bye-laws made, orders, directions and notices issued, and powers conferred thereunder shall cease to apply thereto; and

(b) the Local Government shall, after consulting the committee, frame a scheme determining what portion of the balance of the municipal, school and hospital funds and other property vested in the committee shall vest in Her Majesty for the benefit of the local area, and in what manner the liabilities of the committee shall be apportioned between the committee and the Secretary of State for India in Council; and, on publication of such scheme, such property and liabilities shall vest and be apportioned accordingly.

(3) When the whole area comprised in any municipality is withdrawn from the operation of this Act under section 4, this Act and all rules and bye-laws made, orders, directions or notices issued, and powers conferred thereunder, shall cease to apply thereto; and the balance of the municipal fund and all other property at the time of the issue of the notification vested in the committee shall vest in Her Majesty, and the liabilities of the committee shall be transferred to the Secretary of State for India in Council.

(4) All property vested in Her Majesty under this section shall be applied, under the orders of the Local Government, to the discharge of the liabilities imposed on the Secretary of State for India in Council thereby, or for the promotion of the safety, health, welfare or convenience of the inhabitants of the area affected.

CHAPTER III.

ORGANISATION OF MUNICIPAL COMMITTEES.

Constitution of Committees.

7. (1) There shall be constituted for each municipality under this Act a committee having authority thereover and consisting of (a) so many inhabitants of the municipality as may be determined by the Local Government, elected in manner next hereinafter prescribed to represent wards of the municipality or classes of the inhabitants; and (b) such persons (if any), not exceeding

**Committee to consist of
Elected and Appointed
Members.**

in number one-fourth of the committee, as the Local Government may appoint by name or by office in this behalf:

Provided that, (i) when the circumstances of the municipality are, in the opinion of the Local Government, such as to require it, the Local Government may appoint a larger portion of, or all, the members of the committee; and, (ii) when any places on the committee are required to be filled by election and a sufficient number of members is not elected, the Local Government may fill by appointment the places so left vacant.

(2) The Local Government may by notification delegate to the Commissioner the power of appointment vested in it under sub-section (1) in respect of any committee or any vacancy in any committee.

8. (1) The Local Government shall, for every municipality in which a system of election is introduced, make rules regulating the following matters,

Power for Local Government to make Rules regarding Election of Members of Committees.

namely:—(a) the division of the municipality into wards or of the inhabitants into classes, or both; (b) the number of representatives proper for each ward or class; (c) the qualifications of electors and of candidates for election; (d) the registration of electors; (e) the nomination of

candidates, the time of election and the mode of recording votes; and any other matters relating to the system of representation and of election for which it may seem expedient to provide. (2) The Local Government may, after the committee has come into existence as hereinafter provided, amend, after consulting such committee, the rules under this section.

(3) The members of the committee shall be elected in accordance with the rules under this section for the time being in force.

9. (1) If a member of the committee be appointed by office, the person for the time being holding such office shall, unless and until the Local Government shall otherwise direct, be a member of the committee.

Term of Office of Members of Committee.

(2) The term of office of all other members of the committee shall be fixed by the Local Government by rules, and may be so fixed as to provide for the retirement of members by rotation, but shall not exceed three years.

(3) The term of office of members shall commence, (a) in the case of a member elected at a general election of members, on the first day of January following the election; (b) in the case of a member elected to fill a casual vacancy, on the date of the meeting of the committee next following his election; and (c) in the case of a member appointed by the Local Government or the Commissioner, on the date specified in the order appointing him, or, if no date is so specified, on the date of such order. (4) An outgoing member may, if otherwise qualified, be re-elected or reappointed.

10. (1) Any member of the committee who may wish to resign shall forward his resignation in writing, through the president of the committee, to the Deputy Commissioner for submission to the Commissioner.

Resignation of Member of Committee.

(2) When the acceptance of such resignation by the Commissioner has been communicated to the committee, such member shall be deemed to have vacated his office as such.

11. (1) The Local Government may remove any member of the committee, (a) if he ceases to be an inhabitant of the municipality; (b) if he

Removal of Member. refuses to act or becomes, in the opinion of the Local Government, incapable of acting; (c) if he is declared a bankrupt or an insolvent; (d) if he is convicted of any such offence or subjected by a Criminal Court to any such order as renders him, in the opinion of the Local Government, unfit to continue to be a member; (e) if he is declared by the Local Government disqualified for employment in, or is dismissed from the public service; (f) if he attends none of the meetings of the committee held during the space of three consecutive months; (g) if his continuance in office is, in the opinion of the Local Government, dangerous to the public peace or order; or (h) when he is a salaried officer of Government, if his continuance in office is, in the opinion of the Local Government, unnecessary or undesirable.

(2) A person removed under this section on any ground other than those mentioned in clauses (a) and (f), shall be disqualified for election unless and until the Local Government shall otherwise direct.

Filling of Casual Vacancies. 12. (1) When the place of an elected member of the committee becomes vacant by the resignation or removal of the member, or by his death, a new member shall be elected, in manner prescribed under section 8, to fill the place so vacated.

(2) When the place of a member of the committee appointed by name becomes vacant as aforesaid, the Local Government may, if it shall think fit, appoint a new member to fill the place so vacated.

(3) A person elected or appointed under this section to fill a casual vacancy shall hold office until the person whose place he fills would in the ordinary course have vacated office, and shall then vacate office, but may, if otherwise qualified, be re-elected or re-appointed.

(4) The Local Government may, by notification, delegate to the Commissioner the power conferred on it by sub-section (2) of appointing new members to fill casual vacancies in any committee.

13. Every committee shall be a body corporate by the name of "The Municipal Committee of ———," and shall have perpetual succession and a

Incorporation of Committee. common seal, with power, subject to the provisions of this Act, to acquire and hold property, both movable and immovable, and to transfer any property held by it, and to contract and to do all other things necessary for the purposes of its constitution and may sue and be sued in its corporate name:

Provided that no committee shall transfer any immovable property except in pursuance of a resolution passed at a special meeting and approved by the Local Government.

14. Subject to the provisions of section 5, sub-section (3), the committee shall come into existence at such time as the

Time for Committee coming into Existence. Local Government may, by notification, appoint in this behalf.

15. [Provides for the substitution of this Act for older enactments in force in municipalities already in existence.]

Member of Committee to be Municipal Commissioner. 16. Every member of the committee shall be deemed to be a municipal commissioner within the meaning of any enactment for the time being in force.

NOTE.—A municipal commissioner is a public servant within the meaning of section 21 of the Indian Penal Code, *vide* section 44. Under section 197 of the Criminal Procedure Code, the sanction of Government is in certain cases necessary to the prosecution of a "public servant." The liability of members of committee for misconduct or neglect causing loss or waste of money belonging to the committee is declared in section 43.

President and Vice-President.

17. (1) The committee shall from time to time elect one of its members to be president, and may from time to time elect another of its members to be vice-president:

Election or Appointment of President and Vice-President.

Provided that the Local Government may by notification exclude any municipality from the operation of this sub-section, and may declare that the president or vice-president, or both, shall be appointed by the Local Government from among the members of the committee.

NOTE.—The Presidents of the Rangoon and Mandalay Municipalities are appointed by the Local Government.

(2) A member elected or appointed under this section to be president or vice-president may be elected or appointed by office if he was appointed a member of the committee in the same way.

(3) If a president or vice-president is elected or appointed by office, the person who for the time being holds the office referred to shall be president or vice-president of the committee, as the case may be, during the term fixed under section 18 for the retention of office by a president or vice-president.

NOTE.—If the president or vice-president is *ex-officio* it is unnecessary for a committee to make a fresh election when an officer is transferred.

(4) The Local Government may delegate to the Commissioner the power of appointing the president or vice-president of any committee.

18. (1) Except as provided in section 19, sub-section (3), every president, whether elected by the committee or appointed by the Local Government, and every vice-president appointed by the Local Government shall hold office for such term, not exceeding three years, as the Local Government may by rule fix, and every vice-president elected by the committee shall hold office for such term as the committee may by bye-law fix.

(2) Whenever the president or vice-president ceases to be a member of the committee or tenders in writing to the committee his resignation of his office, he shall vacate his office, and any president or vice-president may be removed from office by the Local Government in pursuance of a resolution

to that effect passed by two-thirds of the members present at a special meeting.

(3) Every resignation of office tendered under this section shall be reported as soon as may be to the Commissioner.

**Vacancies in Office
of President or
Vice-President.**

19. (1) Upon the occurrence of any vacancy in the office of president or vice-president during the term fixed under section 18, a new president or vice-president shall be elected or appointed in manner provided by section 17.

(2) Upon the expiration of the term of office fixed under section 18 for the president or vice-president, a new president shall, and a new vice-president may, be elected or appointed in manner provided by section 17.

NOTE.—A committee under this clause may dispense with the appointment of a vice-president if it so desires.

(3) A person elected or appointed under sub-section (1) to fill a casual vacancy shall hold office until the person whose place he fills would in the ordinary course have vacated office, and shall then vacate office.

(4) An outgoing president or vice-president may, if otherwise qualified, be re-elected or re-appointed.

20. Notwithstanding anything in sections 9, 12, 18 and 19, an outgoing president or vice-president may continue to exercise the powers conferred on a president or vice-president by this Act, or any rule, bye-law, public notice, resolution or direction made thereunder, between the expiry of his term of office and the election or appointment of a new president or vice-president.

**Conduct of Business
during Inter-regnum.**

Notification of Elections, Appointments and Removals.

21. (1) Every election of a president or vice-president of the committee shall be subject to confirmation by the Commissioner, and shall, when so

**Notification of Elec-
tions, Appointments
and Removals.**

confirmed, be notified by him in the gazette; but unless and until disallowed by the Commissioner, every such election shall be valid and shall take effect from the date thereof.

(2) Every appointment of a president or vice-president of the committee shall be notified by the appointing authority in the gazette and shall take effect from the date of such notification.

(3) Every election of a member or members of the committee shall be notified by the Commissioner in the gazette.

(4) Every order removing a member from the committee shall be notified by the Local Government in the gazette and shall be communicated to the person removed and to the committee of which he was a member, and shall take effect from the date on which the committee receives such communication.

Conduct of Business.

22. (1) The committee shall meet for the transaction of business at least once in every month at such time as may be fixed by bye-law made under section 30.

Time for Holding Meetings.

(2) The president, or, in his absence, the vice-president, may, whenever he thinks fit, and shall, on a requisition made in writing by not less than one-fifth of the members of the committee, convene an ordinary or a special meeting at any other time:

Provided that, when the entire number of members does not exceed five, the concurrence of two of them in any such requisition shall be necessary.

Ordinary and Special Meetings.

23. (1) Every meeting of the committee shall be ordinary or special.

(2) Any business may be transacted at an ordinary meeting unless it is required by this Act or the rules or bye-laws thereunder to be transacted at a special meeting.

24. (1) The quorum necessary for the transaction of business at a special meeting shall be one-half of the whole committee:

Quorum. Provided that, when the committee consists of less than six members, the quorum shall be three.

(2) The quorum necessary for the transaction of business at an ordinary meeting shall be such number, not less than three, as may be fixed by bye-law made under section 30:

Provided that, if at any ordinary or special meeting a quorum is not present, the chairman shall adjourn the meeting to such other day as he may think fit, and the business which would have been brought before the original meeting, if there had been a quorum present, shall be brought before and transacted at the adjourned meeting whether there is a quorum present thereat or not.

25. (1) At every meeting of the committee the president, if present, shall preside as chairman.

(2) If when any meeting is held the office of president is vacant, or the president is absent from the meeting and the vice-president is present, the vice-president shall preside as chairman.

Chairman of Meeting.

(3) In any case not provided for in sub-sections (1) and (2) the members present shall elect one of their number to preside as chairman of the meeting.

26. (1) Every member of the committee shall be entitled to attend every meeting of the committee, to take part in the proceedings and to vote upon every matter before it not being a matter in which he is, or may be, pecuniarily interested.

Voting and Exclusion of Members**from Voting when****pecuniarily interested.**

(2) The president of the committee or the chairman of a meeting may, after such inquiry as he may think fit, require any member to absent himself from a meeting during the discussion of any matter in which he is believed to have a pecuniary interest, and any member refusing to comply

with such requisition shall not be permitted to take part in the proceedings regarding such matter, nor shall his vote thereon be recorded.

(3) If the president of the committee or the chairman of a meeting is believed by any member present at the meeting to have a pecuniary interest in any matter under discussion, he may, on the motion of such member, if carried, be required to absent himself from the meeting during such discussion, and, if he refuses to comply with such requisition, he shall not be permitted to take part in the proceedings regarding such matter, nor shall his vote thereon be recorded.

27. (1) Except as otherwise provided by this Act or the rules or bye-laws thereunder, every question coming before a meeting of the committee shall be decided by a majority of the votes of the members present and entitled to vote thereon.

(2) In case of an equality of votes, the chairman of the meeting shall have a second or casting vote.

28. Every resolution passed by the committee at a meeting shall be recorded in a book to be kept for the purpose, shall be signed by the chairman of the meeting or of the next ensuing meeting, shall be open to inspection by the public at the municipal office at all reasonable times without charge, and shall be published in such manner as the Local Government may direct.

29. The discussions and proceedings of the committee shall be conducted either in English or in Burmese and recorded either in English or in both English and Burmese as the committee at a special meeting may from time to time direct: **Language of Discussions and Proceedings.** Provided that, if the discussions and proceedings are conducted and recorded in English, the committee shall provide for their interpretation into Burmese for the benefit of such members (if any) as do not understand English.

30. (1) The committee may, from time to time at a special meeting, make bye-laws consistent with this Act as to (a) the time and place of its meetings; (b) the manner in which notice of its meetings is to be given; (c) the quorum necessary for the transaction of business at ordinary meetings; (d) the conduct of proceedings at meetings and the adjournment of meetings; (e) the exercise by the president, by the vice-president, by sub-committees, by individual members or by officers or servants of the committee, of any powers conferred upon the committee by this or any other Act, or by the rules or bye-laws thereunder; (f) the persons by whom receipts may be granted on behalf of the committee for money paid to it; (g) the term for which a vice-president elected by committee shall hold office; (h) the appointment, duties, leave, suspension and removal of its officers and servants; and (i) other similar matters.

Power of Committees to make Bye-laws as to Conduct of Business. (2) No bye-law made under this section shall take effect until it has been confirmed by the Local Government.

31. In cases of emergency the president, or in his absence the vice-president,

of the committee may direct the execution of any work or the doing of any act which the committee is empowered to execute or do, and the immediate execution or doing of which is, in his opinion, necessary for the service or safety of the public, and may direct that the expense of executing the work or doing

Extraordinary Powers of President and Vice-President in Cases of Emergency.

the act shall be paid from the Municipal fund: Provided that (a) no order shall be made under this section in contravention of any order of the committee passed at a meeting; and (b) every order made under this section, and all proceedings consequent thereon, shall be reported to the committee at its next meeting.

Joint Committees.

32. The committee may, from time to time, concur with any other committee or cantonment, port or other local authority, or with more than one such

Joint Committee of Two or More Committees or Other Local Authorities.

committee or authority, in appointing, from their respective bodies, a joint committee for any purpose in which they are jointly interested, and in appointing a chairman of the joint committee and in delegating to any such joint committee any power which might be exercised by either or any of the said committees or authorities, and in framing and modifying regulations as to the proceedings of any such joint committee, and as to the conduct of correspondence relating to the purpose for which it is appointed.

Defects in Constitution and Irregularities.

33. Nothing done and no proceeding taken under this Act shall be questioned by reason only of any vacancy in the committee or joint committee, or of any defect or irregularity not affecting the merits of the case.

Officers and Servants.

34. (1) The committee shall, from time to time, at a special meeting, appoint one of its members, or, subject to the previous sanction of the Commissioner, any person to be its secretary,

Appointment of Secretary. and may, at a like meeting and subject to the like sanction, remove any person so appointed.

(2) If the secretary is a member of the committee, he shall receive no remuneration in respect of his services. If he is not a member of the committee, the committee may, with the previous sanction of the Commissioner, assign to him such remuneration as it may think fit.

35. Subject to the provisions of this Act and to such rules as may be made by the Local Government thereunder, the committee may appoint and remove

Employment of Other Officers.

such other officers and servants as may be necessary or proper for the efficient execution of its duties, and may assign to such officers and servants such remuneration as it may think fit.

36. If, in the opinion of the Commissioner, the number of persons employed by the committee as officers or servants, or whom the committee proposes to employ as such, or the remuneration assigned by the committee to those persons, or any of them, is excessive, the committee shall, on the requisition of the Commissioner, reduce the number of those persons, or their remuneration, as the case may be:

Power to prevent Extravagance.

Provided that the committee may appeal against any such requisition to the Local Government, and the decision of the Local Government on such appeal shall be final.

37. In the case of an officer or servant, being a Government official, the committee may, (1) if his services are wholly lent to it, meet any charges prescribed or authorised by any general or special orders of the Governor-General in Council for the time being in force regarding contributions towards pension or gratuity and leave allowances; and (2) if he devotes only a part of his time to the performance of duties in behalf of the committee, meet any such charges as aforesaid in such proportion as may be determined by the Local Government.

Pension of Government Officials serving Committee.

38. In the case of an officer or servant, not being a Government official, the committee may (1) grant him (a) leave allowances; (b) a gratuity, if his monthly pay is less than ten rupees; (c) with the sanction of the Local Government, if he is not entitled to pension, a gratuity in any other case; and (2) with the sanction of the Local Government, (a) subscribe, in accordance with any general or special orders of the Governor-General in Council for the time being in force, for a pension or gratuity payable on his retirement, or (b) purchase for him from the Government or otherwise an annuity on his retirement:

Pensions of Other Officers and Servants.

Provided that no pension, gratuity, leave allowance or annuity shall exceed the sum to which, under any general or special orders of the Governor-General in Council for the time being in force, the officer or servant would be entitled if the service had been service under Government.

38A. (1) The Rangoon Municipal Committee may make bye-laws for the purpose of (a) establishing and maintaining a provident or annuity fund;

Power to establish Provident Fund for Officers and Servants of Rangoon Committee.

(b) compelling all or any of the officers or servants of the Committee (other than Government officials) to subscribe to such fund, and, if necessary, providing for the deduction of such subscriptions out of the salaries or emoluments of such servants or officers; (c) providing for the payment of contributions to such fund by the Committee out of other funds vested in the Committee; (d) fixing the times, circumstances and conditions under which payments may be made out of any fund established under this section and the conditions under which such payments shall discharge the fund from further liability; (e) providing for the settlement by arbitration or otherwise of disputes relating to such fund, or the payments or subscriptions thereto or claims thereon, between the Committee and other persons or between persons

claiming any share or interest therein; and (f) regulating generally such other matters incidental to such fund and the investment thereof as the Local Government may approve.

(2) No bye-law made under this section shall come into force until it has been confirmed by the Local Government.

Contracts and Transfers of Property.

39. (1) When a contract made by or on behalf of the committee exceeds in value or amount one hundred rupees, it shall be in writing and signed by the president or vice-president and at least one other member of the committee.

**Mode of executing
Contracts and making
Transfers of Immovable
Property of Committee.**

(2) Every transfer of immovable property belonging to the committee shall be made by an instrument in writing, executed by the president or vice-president and by at least two other members of the committee, and shall recite the number and date of the order of the Local Government approving the resolution for such transfer passed under section 13.

(3) If any such contract or transfer is executed or made otherwise than in conformity with the provisions of this section, it shall not be binding on the committee.

40. (1) If any member, officer or servant of the committee is, otherwise than with the permission in writing of the Commissioner, directly or indirectly interested in any contract made with the committee, he shall be punished with simple imprisonment for a term which may extend to one year, or with fine, or with both, unless it shall appear that he was not aware of such interest.

**Penalty for Member,
Officer, or Servant of
Committee being in-
terested in Contract
made with Committee.**

(2) No person shall by reason only of being a shareholder in, or member of, any incorporated or registered company, be deemed to be interested in any contract entered into between such company and the committee, but every such person shall be treated as pecuniarily interested in such contract within the meaning of section 26.

(3) In the Rangoon Municipality this section shall apply to the paid officers and servants, but not to members of the Committee so interested in such contracts.

40A. (1) Any person nominated or elected a member of the Rangoon Municipal Committee, who is or becomes, or who takes an active part in the

**Interest in Contract to
disqualify Member of
Rangoon Committee.**

business of any person, firm or incorporated or registered company who or which is or becomes, either directly or indirectly, interested in any contract made with such committee, shall be disqualified to continue in office and shall cease to be a member of such committee from the date on which such disqualification is admitted by such person or is declared by the Local Government to be established:

Provided that a member of the committee shall be treated as pecuniarily interested in such contract under section 26, but shall not be so disqualified under this section, by reason only of his having any share or interest in (a) any lease of land or any agreement for the same; or (b) any sale or purchase of land or any agreement for the same, for which the previous sanction of the Local Government has been obtained under this clause; or (c) any agreement for the loan of money or any security for the payment of money only; or (d) any newspaper in which any advertisement relating to the affairs of the committee is inserted; or (e) any stock, shares or debentures of any incorporated or registered company; or (f) any occasional sale by any person, firm or company to the committee to the value not exceeding two thousand rupees in one year, of any articles in which such person, firm or company ordinarily trades.

(2) If any question arises as to whether any person has become disqualified from being a member of the Rangoon Municipal Committee under subsection (1), the President shall refer the matter for the decision of the Local Government and may refuse to permit such person to take part in the proceedings of such committee until such decision becomes known to the committee.

Acquisition of Land.

41. Where any land, whether within or beyond the limits of the municipality, is required by the committee for the purposes of this Act, or for any other object which it is empowered to carry out under any other enactment for the time being in force, the Local Government may, at the request of the committee, proceed to acquire it under the provisions of the Land Acquisition Act, 1894, and on payment by the committee of compensation awarded under that Act and of the charges incurred by the Local Government in connection with the proceedings, the land shall vest in the committee.

Privileges and Liabilities.

42. No suit shall be instituted against the committee, or against a member or officer of the committee, in respect of an act purporting to be done by him in his official capacity, until the expiration of one month next after notice in writing has been, in the case of the committee, delivered or left at its office, and, in the case of a member or officer, delivered to him or left at his office or place of abode, stating the cause of action and the name and place of abode of the intending plaintiff, and the plaint must contain a statement that such notice has been so delivered or left;

Provided that this section shall not apply to any suit instituted under section 54 of the Specific Relief Act, 1877.

NOTE.—Section 54 of the Specific Relief Act relates to suits for injunctions.

43. Every person shall be liable for the loss, waste or misapplication of any money or other property belonging to the committee if the loss, waste or misapplication is a direct consequence of his neglect or misconduct while a member of the committee, and a suit for compensation may be instituted against him by the committee or by the Secretary of State for India in Council.

NOTE.—(a) It has been laid down that when irregular payments are sanctioned by municipal committees the members of the committee are personally responsible for the sum paid without proper authority.

44. Every member, officer or servant of the committee, and every farmer or agent for the recovery on behalf of the committee of any tax, fee or other impost, shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code.

45. (1) In the absence of a written contract to the contrary every sweeper employed by the committee shall be entitled to one month's notice before discharge or to one month's wages in lieu thereof, unless he is discharged for misconduct or at the end of a specified term for which he was engaged.

(2) Should any sweeper employed by a committee, in the absence of a written contract authorising him so to do and without reasonable cause, resign his employment, or absent himself from his duties without giving one month's notice to the committee, or neglect or refuse to perform his duties or any of them, he shall be liable to imprisonment for a term which may extend to two months.

(3) The Local Government may by notification direct that, on and from a date to be specified in such notification, the provisions of sub-sections (1) and (2) with respect to sweepers shall apply also to any specified class of municipal servants whose functions intimately concern the public health or safety.

CHAPTER IV.

TAXATION.

[This chapter sets forth the various taxes which may be levied by a Municipal Committee, prescribes the procedure for imposing taxes, invests the Committee with the power to abolish or suspend a tax, with the sanction of the Local Government, invests the Committee, subject to the sanction of the Local Government, and the Local Government itself with the power of exempting from the payment of any tax any person or class of persons, or any property, animals, or vehicles. The Local Government is empowered to require a Committee to effect changes which may appear to the Government to be necessary in order to remove objections to any tax which the Government deems to be unfair in its incidence or injurious to the public interest, and if

such changes are not made within a specified time the Government may take action in the matter. The Local Government is empowered to make rules consistent with the Act for the assessment, collection, remission or refund of taxes leviable under the Act, and for preventing evasion of the same.

The creation of an assessment-list is provided for of all buildings and lands on which any tax is imposed, and provision is made for revision of the assessment and for appeals against the assessment.

For taxes levied on buildings the responsibility for payment rests jointly and severally upon all persons who have been either owners or occupiers at any time during the year of assessment. When a building has remained unoccupied during the whole period covered by an assessment, the amount payable on such building is to be remitted or refunded, as the case may be; and if a building has been wholly or partially destroyed by fire or has not been occupied or productive of rent for any period of not less than sixty days, the Committee may remit or refund such portion of the tax as it may think equitable.

No tax may be imposed by a Committee without the previous sanction of the Local Government, and taxes other than those enumerated below can only be imposed with the previous sanction of the

Taxes which may be imposed. Local Government and the Governor-General in Council. The following are the taxes which may

be imposed with the previous sanction of the Local Government:—(a) a tax on buildings and lands not exceeding ten per cent. of the annual value; (b) a tax on lands covered by buildings at a rate not exceeding three pies—equal to about one farthing or one half of a cent—per square foot per annum; or if the lands are covered by buildings of two or more stories, at a rate not exceeding four pies per square foot per annum; (c) a tax on lands not covered by buildings at a rate not exceeding ten rupees per acre per annum; (d) a tax on buildings according to the length of street frontage occupied by such buildings at rates not exceeding the following, namely:—

	Per annum.		
	Rs.	A.	P.
For a building having not more than ten feet of street frontage	0	8	0
For a building having more than ten, but not more than twenty, feet of street frontage	1	8	0
For a building having more than twenty, but not more than thirty, feet of street frontage	2	8	0
For a building having more than thirty, but not more than forty, feet of street frontage	4	0	0
For a building having more than forty, but not more than fifty, feet of street frontage	7	0	0
For a building having more than fifty, but not more than sixty, feet of street frontage	10	0	0
And for each additional ten, or part of ten, feet of street frontage	4	8	0

(e) a tax on households or families at a rate not exceeding thirty per cent. per annum on the amount of the *thathameda* tax * assessed upon each household or family; (f) a tax, not exceeding nine rupees per quarter, on every vehicle, boat, beast used for driving, riding, draught or burden, or dog, kept within

* For *thathameda* tax see p. 607.

the municipality—this power to tax vehicles, boats, and animals is distinct from the further power granted elsewhere in the Act to make rules rendering licenses necessary for the proprietors or drivers of vehicles, etc., plying for hire within the municipality and to fix fees payable for such licenses; (g) a tax on private markets at a rate not exceeding five per cent. of the annual net profits derived by the owners therefrom; (h) a toll, not exceeding eight annas, on every vehicle or boat used as stated above entering the municipality and not liable to taxation under clause (f)—this tax may be compounded by a payment equal to what would have been due had the vehicle or beast been taxable under clause (f).

Only one of the taxes mentioned in clauses (a), (b), (c), and (d) may be imposed in respect of the same building, and no tax under clause (e) may be levied on any person who is liable to pay a tax under clause (a), (b), (c), or (d). Only one of the taxes mentioned in clauses (a) and (g) may be imposed in respect of the same premises.

A tax may be imposed at different rates in different parts of a municipality. In addition to the taxes enumerated above a water-tax may be levied for the purpose of meeting maintenance charges and interest on loans raised for the construction of water-supply works. The tax can only be levied upon buildings or lands which are so situated that their occupiers can benefit by such works, and in fixing the rate of the tax regard must be had to the principle that the total net proceeds of the tax, together with the estimated income from payments for water supplied from the works under special contracts or otherwise, should not exceed the amount required for maintenance and the payment of interest.

A lighting-tax to cover the charges for street lighting may be imposed on conditions similar to those stated in the previous paragraph; and a scavenging-tax and a latrine tax may also be levied to cover the cost of street cleaning and the removal of sewage or rubbish from buildings and lands and for the supply of public latrines. In each case the tax must not exceed the estimated net cost of the works.]

CHAPTER V.

FUNDS AND PROPERTY.

[This chapter provides for the formation of a municipal fund for each municipality and declares what moneys may be credited to the fund. These are chiefly the proceeds of the taxation referred to in the previous chapter of the Act.

The committee must set aside annually out of the municipal fund, first, such sum as may be required for the payment of any amounts falling due on any loan legally contracted by it; secondly, such sum as may be required to meet the charges of its own establishment; thirdly, such sums as may be necessary to pay the expenses of pauper lunatics and pauper lepers sent to public asylums from the municipality, the expenses incurred in auditing the accounts of the committee, and such portion of the

Objects to which
the Funds are to
be devoted.

Provincial Departments of Education, Sanitation, Vaccination, Medical Relief, and Public Works, as may be deemed by the Local Government to be equitably debitable to the committee in return for services rendered to it by such departments or any of them.

When the above charges have been met, the funds are applicable to the following matters:—(a) the construction, maintenance, improvement, cleansing, and repair of streets and of public bridges, embankments, drains, latrines, tanks, and watercourses; (b) the watering and lighting of the streets or any of them; (c) the prevention and extinction of fires; (d) the construction, establishment, and maintenance of schools, hospitals, dispensaries, leper asylums, and other institutions for the promotion of education, or for the benefit of the public health, and of rest-houses, *zayats*, wharves, poorhouses, markets, encamping-grounds, pounds, and other works of public utility, and the control and administration of public institutions of any of these descriptions; (e) grants-in-aid to schools, hospitals, dispensaries, poorhouses, leper asylums, and other educational or charitable institutions; (f) the training of teachers and the establishment of scholarships; (g) the giving of relief and the establishment and maintenance of relief works in time of scarcity or famine; (h) the supply, storage, and preservation from pollution of water for the use of men or animals; (i) the planting and preservation of trees; (j) the taking of a census, the registration of births, marriages, and deaths, public vaccination, and any other sanitary measures; (k) the keeping and auditing of the accounts of the municipal fund, the school fund, and the hospital fund; (l) the holding of fairs, and industrial exhibitions; and (m) all other acts and things which are likely to promote the safety, health, welfare or convenience of the inhabitants, or expenditure whereon may be declared by the committee, with the sanction of the Local Government, to be an appropriate charge on the municipal fund.

The municipal fund referred to above must be formed by each municipality; and it is provided further that there may be formed school funds and hospital funds in each municipality, the funds to be devoted specially to purposes connected with education and public health respectively.

The management, control, and administration of every public institution maintained out of the municipal fund are vested in the committee; but the Local Government may prescribe the extent of the independent authority of the committee in respect of any such institution.

Where school or hospital funds are maintained, the committee may delegate its authority in such matters to sub-committees.

This chapter of the Act makes a formal declaration of the property vested in and belonging to the committee. The list includes all public buildings, streets, tanks, wells, and so on.]

CHAPTER VI.

POWERS FOR SANITARY AND OTHER PURPOSES.

[This chapter vests the committee with the powers usually granted to municipalities in all countries in respect of: closing streets for repairs, closing

streets to any particular kind of traffic, naming streets and numbering houses, regulating the use of inflammable material in building, the making of building regulations, providing bathing and washing places, the slaughter of animals, the sale of food, drink, and drugs, regulating burials and cremations, precautions against and extinction of fires, the inspection of sewers and buildings, the regulation of dangerous and offensive trades, and measures for dealing with epidemic disease.

The committee is authorised also to make bye-laws:—(a) for rendering licenses necessary for the proprietors or drivers of vehicles, boats or beasts plying for hire within the limits of the municipality, and for fixing the fees payable for such licenses and the conditions on which they shall be granted and may be revoked; (b) for limiting the rates which may be demanded for the hire of any carriage, cart, boat, or other conveyance, or of beasts hired to carry loads, or for the services of persons hired to carry loads, and the loads to be carried by such conveyances, beasts, or persons, where they are hired within the municipality for a period not exceeding twenty-four hours, or for a service which would ordinarily be performed within twenty-four hours; (c) for securing a proper registration of births, marriages, and deaths, and for the taking of a census; (d) (i) for fixing, and from time to time varying, the number of persons who may occupy a lodging-house, for rendering licenses necessary for the proprietors or keepers of lodging-houses and for fixing the fees payable for such licenses and the conditions subject to which they shall be granted and may be revoked; (ii) for the registration and inspection of lodging-houses; (iii) for promoting cleanliness and ventilation in lodging-houses; (iv) for the precautions to be taken in the case of any infectious disease breaking out in a lodging-house; and (v) generally for the proper regulation of lodging-houses; (e) for rendering licenses necessary for pawn-brokers and determining by public auction or otherwise the amount to be paid for any such license and the conditions subject to which they shall be granted and may be revoked; (f) for rendering licenses necessary for the establishment of any new market and fixing the fees to be paid for such licenses and the conditions subject to which they may be granted and revoked; (g) for the inspection and proper regulation of encamping-grounds, pounds, *zayats*, wharves not within the limits of any port, markets, washermen's tanks, and public washing and bathing places; (h) for controlling and regulating the use of any public river, creek or stream, and the foreshore and banks thereof within the municipality and not included within the limits of a port, and for levying fees for the use of such public river, creek or stream; (i) for regulating the disposal of food, drink or drugs seized under section 110 or 111; (j) for the holding of fairs and industrial exhibitions within the municipality and under the committee's control; (k) for controlling and regulating the use and management of burial and burning grounds; (l) for the supervision and regulation of public wells, tanks, springs or other sources from which water is, or may be made, available for public use; (m) for requiring and regulating the exhibition of tables showing the rates of tolls chargeable on vehicles and animals entering the municipality; (n) for requiring occupiers of houses to keep ready at hand buckets or pots of water, hooks, bamboo-flappers, and other appliances for extinguishing small fires; (o) for prescribing, notwithstanding

the provisions of Act XXXI of 1871, the standard weights and measures to be used within the municipality; (p) for protecting from injury or interference anything within the municipality which is the property of the committee; (q) for regulating or prohibiting the exposure of goods for sale on the streets and for levying fees from persons setting up stalls or otherwise selling goods on streets; (r) for regulating or prohibiting the keeping of animals of any specified description; and (s) generally, for carrying out the purposes of this Act:

Provided that the committee of a municipality in which the Hackney Carriages Act, 1879, is in force, shall not make bye-laws under clauses (a) and (b) in respect of any vehicles to which that Act applies.

No bye-law made under any section of this chapter can come into force until it has been confirmed by the Local Government.]

CHAPTER VII.

OFFENCES AFFECTING THE PUBLIC HEALTH, SAFETY, OR CONVENIENCE.

[This chapter describes the various offences, and provides for the punishments to be inflicted in each case on conviction. The offences are such as are naturally suggested by the title of the chapter: depositing rubbish on roads or drains, driving vehicles after dark without proper lamps, discharging firearms or fireworks, obstructing the streets, wilful exposure of persons suffering from infectious disease, failure to report the existence of dangerous epidemic disease, the unauthorised posting of advertisements, keeping a disorderly house, and so on.]

CHAPTER VIII.

CONTROL.

182. (1) The Commissioner or the Deputy Commissioner may (a) enter on and inspect, or cause to be entered on and inspected, any immovable property situate within the limits of his division or district, as the case may be, and occupied by any committee, hospital

sub-committee, school sub-committee or joint committee, or any work which is in progress within such limits under the direction of any such committee, sub-committee or joint committee; (b) call for and inspect any book or document in the possession or under the control of any such committee, sub-committee or joint committee having authority within such limits; (c) require any such committee, sub-committee or joint committee to furnish such statements, accounts, reports, and copies of documents relating to the proceedings or duties of such committee, sub-committee or joint committee as he may think fit to call for; and (d) record in writing, for the consideration of any such committee, sub-committee or joint committee, any observations he may think proper in regard to the proceedings or duties of such committee, sub-committee or joint committee:

Provided that (i) when the Deputy Commissioner is a member of a committee, sub-committee or joint committee, he shall not exercise, in respect of that committee, sub-committee or joint committee, the powers conferred upon him by this section; and (ii) in the case of any municipality, the Local Government may, by notification in the gazette, direct that all or any of the powers conferred on the Commissioner and Deputy Commissioner by this section shall be exercised by it alone, and not by such Commissioner and Deputy Commissioner.

NOTE.—In the case of the Rangoon Municipality it has been directed that all the powers conferred on the Commissioner and Deputy Commissioner by section 182 shall be exercised by the Local Government.

(2) When the Local Government, the Commissioner or Deputy Commissioner requests the committee to consider any observations under subsection (1), clause (d), nothing in any bye-law made under section 30 shall prevent such consideration.

183. (1) The Commissioner or Deputy Commissioner may, by order in writing, suspend within the limits of his division or district, as the case may be, the execution of any resolution or order of a committee or joint committee, or prohibit the doing within such limits of any act which is about to be done, or is being done, in pursuance of or under cover of this Act, if, in his opinion, such resolution, order or act is in excess of the powers conferred by law, or the execution of the resolution or order, or the doing of the act, is likely to lead to a serious breach of the peace, or to cause serious injury or annoyance to the public or to any class or body of persons.

(2) When the Commissioner or Deputy Commissioner makes any order under this section, he shall forthwith forward a copy thereof, with a statement of his reasons for making it and of any representations regarding it, submitted to him by the committee, to the Local Government, which may thereupon rescind the order or direct that it shall continue in force, with or without modification, permanently or for such period as it may think fit.

NOTE.—Rangoon Municipality excepted.

184. (1) In cases of emergency, the Deputy Commissioner may provide for the execution of any work, or the doing of any act which a committee is empowered to execute or to do, and the immediate execution or doing of which is in his opinion necessary for the service or safety of the public, and may direct that

the expense of executing such work or doing such act shall be forthwith paid by the committee.

(2) If the expense is not so paid, the Deputy Commissioner may make an order directing the person having the custody of the balance of the municipal fund to pay the expense, or so much thereof as is from time to time possible, from the balance in preference to any or all other charges against the same.

(3) The Deputy Commissioner shall forthwith report to the Commissioner every case in which he uses the powers conferred upon him by this section.

NOTE.—Rangoon Municipality excepted.

185. (1) If at any time it appears to the Local Government that the committee has made default in performing any duty imposed on it by or under this or any other Act for the time being in force, the Local Government may, by order in writing, fix a period for the performance of such duty.

Power of Local Government in Cases of Default of Committee.

(2) If such duty is not performed within the period so fixed, the Local Government may appoint the Deputy Commissioner to perform it, and may direct that the expense of performing it shall be paid, within such time as it may fix, to the Deputy Commissioner by the committee.

(3) If the expense is not so paid, the Deputy Commissioner, with the previous sanction of the Local Government, may make an order directing the person having the custody of the balance of the municipal fund to pay the expense, or so much thereof as is from time to time possible, from the balance in preference to any or all other charges against the same.

186. (1) The Local Government and the Commissioner and Deputy Commissioner, within their respective jurisdictions, acting under the orders of the Local Government, shall be bound to require the proceedings of every committee to be in conformity with law and with any rules in force under any enactment for the time being applicable to Burma generally or to the area over which such committee has authority.

Powers of Local Government and its Officers over Committees.

(2) The Local Government may exercise all powers necessary for the performance of this duty, and may, amongst other things, by order in writing annul or modify any proceeding which it may consider not to be in conformity with law or with any such rules as aforesaid.

(3) The Commissioner and the Deputy Commissioner may, within their respective jurisdictions, for the same purpose, exercise such powers as may be conferred upon them by rule made in this behalf by the Local Government.

187. (1) If the committee is not competent to perform, or persistently makes default in the performance of, the duties imposed on it by or under this or any other Act for the time being in force, or exceeds or abuses its powers, the Local Government may, with the previous sanction of the Governor-General in Council, by an order published, with the reasons for making it, in the gazette, declare the committee to be incompetent, or in default, or to have exceeded or abused its powers, as the case may be, and direct its supersession for a period to be specified in such order.

Power of Local Government to supersede Committee in Case of Incompetency, Persistent Default, or Excess or Abuse of Powers.

(2) When the committee is so superseded, the following consequences shall ensue, namely:—(a) all members of the committee shall, as from the date of the order published under sub-section (1), vacate their offices as such members; (b) all powers and duties of the committee may, during the period of supersession, be exercised and performed by such person or persons as the Local Government shall appoint in that behalf; and (c) all property vested in the committee shall, during the period of supersession, vest in the Local Government.

(3) On the expiration of the period of supersession specified in the order published under sub-section (1), the committee shall be reconstituted, and the persons who vacated their offices under sub-section (2), clause (a), shall not, if otherwise qualified, be deemed disqualified from being members thereof.

188. (1) If any dispute for the decision of which this Act does not otherwise provide arises between the committee and any other local authority, it shall be referred (a) to the Deputy Commissioner if the

Disputes. local authorities concerned are in the same district; (b) to the Commissioner if the local authorities concerned are in different districts of the same division; (c) to the Local Government if the local authorities concerned are in different divisions.

(2) The decision of the authority to which any dispute is referred under this section shall be final.

(3) If in the case mentioned in sub-section (1), clause (a), the Deputy Commissioner is one of the persons constituting any of the local authorities concerned, his functions under this section shall be discharged by the Commissioner.

NOTE.—Rangoon Municipality excepted.

189. (1) The committee shall, at the close of each year or of such other period as may, from time to time, be fixed by the Local Government in this

Annual Reports and Statements. behalf, submit to the Local Government a statement of its receipts and disbursements in such form as the Local Government may prescribe and a general report of its proceedings during that period: Provided that separate accounts shall be submitted of (a) all receipts of the water-tax, and all expenditure on the purposes for which the water-tax is levied; (b) all receipts of the lighting-tax, and all expenditure on the purposes for which the lighting-tax is levied; (c) all receipts of the latrine-tax, and all expenditure on the purposes for which the latrine-tax is levied; (d) all receipts of the scavenging-tax, and all expenditure on the purposes for which the scavenging-tax is levied; (e) all income under the heads mentioned in section 73,* and all expenditure on educational purposes; and (f) all income under the heads mentioned in section 74,† and all expenditure on medical purposes.

(2) Accounts submitted under this section shall be examined or audited in such manner as the Local Government may prescribe.

* Section 73 gives the heads under which income may be credited to School Funds.

† Section 74 gives the heads under which income may be credited to Hospital Funds.

190. (1) The committee shall submit, before such date in each year as may be directed by the Local Government, for the sanction of such authority as the Local Government may appoint in this behalf, an estimate of its probable receipts for the financial year next following, with proposals for expenditure, and may, from time to time, submit in like manner further estimates or proposals in modification of those submitted as aforesaid.

(2) No expenditure shall be incurred by a committee unless it is provided for in an estimate and proposals sanctioned under this section.

NOTE.—Rangoon, Mandalay, Akyab, Bassein and Moulmein Municipalities excepted.

(3) An abstract of the annual estimate and proposals submitted and sanctioned as required by this section shall be published in such manner as the Local Government shall direct.

191. (1) No work, the estimated cost of which exceeds five hundred rupees, shall be begun by the committee, nor shall any contract be entered into by it in respect of any such work, until a plan and estimate thereof have been approved by the committee at a meeting.

NOTE.—(1) Rangoon and Mandalay Municipalities excepted.

(2) If the estimated cost of any such work has not been specifically provided for in proposals submitted and sanctioned in manner mentioned in section 190, or exceeds twenty thousand rupees in the case of the municipalities of Moulmein, Bassein and Akyab, or one-tenth of the estimated annual income of the municipal fund in the case of any other municipality, such work shall not be begun, nor shall any contract be entered into in respect of it, until the plan and estimate have been submitted to and approved by the Local Government, or by an officer empowered by the Local Government in this behalf.

NOTE.—The powers of the Rangoon and Mandalay Municipal Committees to sanction public works expenditure have been restricted to estimates not exceeding Rs. 20,000.

192. In all matters connected with the administration of this Act, the Commissioner shall have and exercise the same authority and control over every Deputy Commissioner subordinate to him as he has and exercises over such Deputy Commissioner in the general and revenue administration.

193. The Local Government may frame forms for any of the proceedings of committees for which it considers that a form should be provided, and may, in addition to rules made under any other powers conferred by this Act, make rules consistent with this Act (a) as to the officers to be addressed by committees when desirous of communicating with the Local Government or officers of

the Local Government; (b) as to the preparation of estimates of the receipts and expenditure of committees, and as to the conditions subject to which such estimates may be sanctioned; (c) as to the returns, statements and reports to be submitted by committees; (d) as to the keeping and auditing of the accounts of municipal funds, school funds and hospital funds; (e) as to the appointment and removal of officers and servants of committees; and (f) generally, for the guidance of committees and public officers in all matters connected with the carrying out of this Act.

CHAPTER IX.

SUPPLEMENTAL.

[This chapter deals with procedure, in prosecutions under the Act, for the making of rules and bye-laws, and for the recovery of taxes, fees, and other moneys due to the committee.

It further empowers the Local Government to except any municipality from the operation of any provisions of the Act which may seem to the Government to be unsuited to such municipality.

It declares that nothing in the Act shall affect the Local Authorities Loan Act of 1879; and makes provision for certain minor matters.]

CHAPTER X.

SMALL TOWNS.

[This chapter provides for the case of towns which are considered too small to be constituted municipalities, but in which, nevertheless, it is desirable to establish some kind of authority for dealing with such matters as are dealt with by the municipal committees in the larger towns. It is provided that such small areas may be declared by the Government to be "notified areas," that a notified area must contain less than ten thousand inhabitants, and must contain either a town or a market.

The Commissioner of the Division is empowered to appoint two or more persons to be a town committee for any notified area; and the Government may extend to any notified area the provisions of any section of the Municipal Act, impose therein any tax which might have been imposed if the area had been a municipality, and arrange for the expenditure of funds on the same general lines as those laid down for municipalities. For the purpose of any section of the Municipal Act or any rules extended or applied to notified areas, and for the purposes of the Vaccination Act of 1880 and of any other enactment which may be specified in this behalf for any notified area, the town committee is deemed to be a committee and the area a municipality.]

STATISTICS OF MUNICIPALITIES.

The following tables disclose the principal facts of interest in regard to the operation of municipal government in Burma.

In preparing these tables, I have followed the method adopted in the official report, and have shown the figures for Rangoon separately:—

NUMBER AND POPULATION OF MUNICIPALITIES, AND NUMBER OF MEMBERS OF COMMITTEE, 1901-05.

	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
<i>Number of Municipalities:</i>					
Rangoon	1	1	1	1	1
Other Municipalities	41	41	41	40	40
<i>Population within Municipal Limits:</i>					
Rangoon	232,326	218,002	221,160	221,160	240,000 (?)
Other Municipalities	660,916	668,264	668,364	662,110	664,914
<i>Number of Members of Committee:</i>					
Rangoon	25	25	25	25	25
Other Municipalities	532	534	535	518	512
<i>Of these Members there were in Rangoon:</i>					
<i>Ex officio</i>					
Nominated	6	6	6	6	6
Elected	19	19	19	19	19
Officials	4	3	3	3	3
Non-officials	21	22	22	22	22
Natives	11	11	12	12	12
Europeans	14	14	13	13	13
<i>Other Municipalities:</i>					
<i>Ex officio</i>					
Nominated	164	169	170	161	159
Elected	277	273	270	262	261
Officials	91	92	95	95	92
Non-officials	194	201	199	191	185
Natives	338	333	336	327	327
Europeans	375	384	381	370	367
	157	150	154	148	145

The following table shows the income of the municipalities of Burma (excluding Rangoon) during the years 1900-01. to 1904-05. Under *Municipal Rates and Taxes* are included: taxes on houses, land, animals, vehicles, professions, and trades; tolls on roads and ferries; water rate; lighting rate; conservancy, including scavenging and latrine rates, and a small item under "other taxes." Under *Realisations under Special Acts* are included receipts from pounds, from hackney carriages, from licenses for the sale of spirits and drugs, and a small item under "other sources." Under *Revenue derived from Municipal Property and Powers apart from Taxation* are included: fees and

revenue from educational institutions, medical institutions, markets and slaughter-houses, and tramways; and a few small items each under Rs. 30,000. Of the receipts under this general head by far the most important share is contributed by fees and revenue from slaughter-houses and markets. This item contributed to the revenues during the past five years a sum exceeding the total sum received under the head *Municipal Rates and Taxes*; that is to say, an average of about Rs. 1,200,000 a year. Under the head *Grants and Contributions* are included sums paid by the Government, from Local Funds and from other sources as grants and contributions for educational, medical, and general purposes. Under the head *Extraordinary and Debt* the most important item is loans raised in the open market.

INCOME OF THE MUNICIPALITIES IN BURMA, EXCLUDING
RANGOON, DURING 1901-05.

(IN RUPEES.)

Source of Income.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
Opening Balance	448,839	612,201	680,079	709,470	999,221
Municipal Rates and Taxes	867,572	923,522	977,551	1,087,382	1,078,567
Realisations under Special Acts	37,720	31,616	37,627	42,870	40,899
Revenue from Municipal Property and Powers apart from Taxation	1,189,927	1,232,866	1,303,989	1,258,915	1,336,709
Grants, Contributions	89,228	91,563	151,777	90,310	135,826
Miscellaneous	8,828	13,106	16,594	57,129	28,190
TOTAL INCOME	2,193,285	2,292,673	2,487,538	2,536,306	2,629,502
Extraordinary, Debt	98,418	321,594	731,079	1,375,261	327,211
Total Receipts, excluding opening balance	2,291,703	2,614,267	3,218,617	3,911,567	2,947,713
Incidence of Taxation * per head of population	1.27	1.36	1.42	1.64	1.62
Incidence of Income † per head of population	3.40	3.43	3.72	3.53	3.94

The following table shows the expenditure of the municipalities of Burma, excluding Rangoon, during the years 1900-01 to 1904-05. Under the head *Details of Municipal Expenditure* *General* are included general administration, collection of taxes, collection of tolls on roads and ferries, survey of land, refunds, pensions

* Taxation is taken to mean municipal rates and taxes.

† Income is taken to mean "Total Income" as shown in the table.

MUNICIPAL ADMINISTRATION

709

and gratuities. Under the head *Miscellaneous* are included interest on loans and some minor items. Under the head *Extraordinary and Debt* are included investments, payments to sinking funds, repayment of loans, advances, and deposits. Under the head *Public Safety* are included fire, lighting, and police. The various items under the other major heads are given in full.

DETAILS OF THE EXPENDITURE OF MUNICIPALITIES
IN BURMA, EXCLUDING RANGOON,
DURING 1901-05.

(In Rupees.)

Object of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
General	243,291	252,529	274,454	285,446	291,729
Public Safety	195,895	201,080	189,849	217,949	224,366
Health and Convenience:					
Water supply:					
Capital outlay	34,727	57,452	399,981	333,632	180,287
Establishment and repairs,	8,450	21,018	102,006	99,294	40,020
Drainage:					
Capital outlay	14,665	79	174	1,815	7,078
Establishment and repairs,	98	27,333	36,927	22,402	16,009
Conservancy	394,832	435,269	457,862	487,502	516,255
Hospitals and Dispensaries	279,773	326,331	365,741	358,339	374,575
Vaccination	15,012	16,289	15,149	16,330	13,777
Markets and Slaughter-houses,	171,611	180,420	222,223	648,230	484,305
Fountains	7,905	7,154	9,045	8,207	8,326
Dak bungalows and serais	1,121	1,264	6,244	2,774	1,101
Arboreal culture, gardens	7,921	7,343	6,890	8,811	5,821
Veterinary charges	—	—	—	882	741
Registration, births and deaths	10,470	11,499	10,909	10,285	10,807
Public Works:					
Establishment	85,250	100,556	96,592	109,499	108,410
Buildings	1,644	6,318	7,969	11,256	14,699
Roads	325,439	439,268	458,215	398,925	379,035
Stores	2,260	7,182	3,961	484	1,542
Total Health and Convenience,	1,261,178	1,650,715	2,199,878	2,518,787	2,165,265
Public Instruction	138,969	148,279	141,968	139,836	147,312
Contributions	50,255	50,478	70,569	57,403	57,513
Miscellaneous	20,224	28,304	50,489	112,447	109,974
TOTAL EXPENDITURE	2,009,812	2,231,285	2,927,237	3,331,868	2,994,161
Extraordinary and Debt	129,690	224,724	254,988	289,948	345,273
Total Disbursements	2,139,502	2,456,009	3,182,225	3,621,816	3,339,434
Closing Balance	669,040	660,459	716,471	999,221	607,501

The following table shows the income of Rangoon Municipality during the years 1900-01 to 1904-05. The heads of income are the same as those adopted for the other municipalities; and these are explained on page 707. The following figures are taken, for the first four years from the volume *Judicial and Administrative Statistics of British India for 1903-04 and preceding Years*, and for 1904-05 from the *Burma Gazette* of 7th July, 1906:—

INCOME OF RANGOON MUNICIPALITY DURING 1901-05.

(IN RUPEES.)

Opening Balance	690,816	1,352,167	1,580,316	1,995,225	1,158,180
Municipal Rates and Taxes	1,227,299	1,294,025	1,338,576	1,443,162	1,542,736
Resolutions under Special Acts	19,656	14,111	22,438	25,638	24,269
Revenue from Municipal Property and Powers apart from Taxation	538,067	525,671	557,910	677,864	653,044
Grants, Contributions	564,778	363,678	386,082	151,907	127,013
Miscellaneous	41,228	62,496	158,797	103,567	83,000
TOTAL INCOME	2,411,128	2,258,967	2,462,703	2,402,138	2,430,088
Extraordinary Debt	1,671,029	1,519,012	4,017,155	2,275,757	1,705,568
Total Receipts, excluding opening balance	4,082,157	3,777,979	6,479,858	4,677,895	4,135,657
Incidence of Taxation * per head of population	5.27	5.84	6.01	6.52	†
Incidence of Income † per head of population	10.38	10.32	11.14	10.86	‡

The following table shows the expenditure of Rangoon Municipality during the years 1901-05. The heads of expenditure are the same as those adopted for the other municipalities; and these are explained on page 708. The figures are taken from the same sources as those referred to above in connection with the details of revenue.

(Table on next page.)

* Taxation is taken to mean municipal rates and taxes.

† Income is taken to mean all ordinary receipts, excluding opening balance and receipts under "Extraordinary and Debt"; that is to say, the head "Total Income" in the table.

‡ I have been unable to find any official statement of the population of Rangoon in 1904-05.

MUNICIPAL ADMINISTRATION

711

EXPENDITURE OF RANGOON MUNICIPALITY DURING 1901-05.

(IN RUPEES.)

Object of Expenditure.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
General	144,826	199,615	198,331	*388,199	188,821
Public Safety	153,617	120,785	94,224	90,717	111,397
Health and Convenience:					
Water Supply:					
Capital outlay	—	—	1,017,261	2,140,737	1,246,066
Establishment and repairs	139,159	570,941	115,699	162,394	208,055
Drainage:					
Capital expenditure	—	—	18,966	30,585	10,201
Establishment and repairs	179,079	294,656	116,576	132,702	167,430
Conservancy	321,212	327,397	338,810	351,981	429,476
Hospitals and Dispensaries	278,023	239,538	247,242	98,272	158,301
Vaccination	7,259	5,832	4,422	3,805	4,876
Markets and Slaughter-houses, Pounds	83,946	53,306	90,604	94,305	148,081
Arboriculture and Gardens	151	983	181	1,702	285
Veterinary charges	48,285	22,279	21,423	23,849	39,387
Registration, births and deaths, Public Works:	—	—	8,179	8,663	15,932
Establishment	6,956	6,586	6,585	7,478	9,111
Buildings	83,395	92,159	96,871	105,931	113,401
Roads	7,906	9,472	28,634	2,442	9,615
Reclamation of town lands	431,265	267,946	530,131	241,996	429,734
Total Health and Convenience	189,543	132,063	268,023	†	†
Public Instruction	1,776,221	2,123,158	2,919,574	3,406,912	2,890,172
Contributions	12,735	13,991	92,588	100,722	101,604
Miscellaneous	10,833	14,113	8,832	20,434	9,177
Total	270,159	292,970	404,937	391,298	554,699
TOTAL EXPENDITURE	2,367,891	2,764,632	3,718,886	4,398,282	3,855,871
Extraordinary and Debt	832,715	783,212	1,507,548	1,116,658	444,350
Total Disbursements	3,220,606	3,547,844	5,226,434	5,514,940	4,301,126
Closing Balance	1,252,167	1,580,316	2,833,740	1,158,180	993,613

TOWN FUNDS.

The Government has exercised its power, as laid down in Chapter X. of the Municipal Act of 1898, of providing certain notified areas with the machinery of municipal government without constituting them municipalities. The public funds of such notified areas are called Town Funds, and of these there were in the Province on 31 March, 1905, fifteen. The aggregate opening balance of these funds for the official year 1904-05 was Rs. 168,899. The total revenue and receipts for the year amounted to Rs. 409,292; and the expenditure was Rs. 393,164.

* The great increase in this year was due to an exceptionally heavy payment on account of annuities.

† The decrease is due to the transfer of the municipal hospitals to the control of the Government.

‡ Separated from the general accounts in 1903-04.

CHAPTER XVII.

VILLAGE ADMINISTRATION

REFERENCES.

- Lower Burma Village Manual. Rangoon, Govt. Press, 1900, pp. 6 + 106.
Upper Burma Village Manual. Rangoon, Govt. Press, 1899, pp. vi + 101.
The Village Headman's Manual, Upper Burma. Third edition. Rangoon, Govt. Press, 1904, pp. 16.
Resolution on the Reports of Village Administration in Burma. Rangoon, Govt. Press. Annual.

The existence of a system of village administration in Burma rests upon two enactments,—the Lower Burma Village Act, 1889, and the Upper Burma Village Regulation, 1887. Both the Act and the Regulation have been amended from time to time, the latest amendment in each having been effected by the Burma Village Law Amendment Act, 1902.

The Act and the Regulation, as amended to 1898, may be found in the Burma Code, and the amending Act of 1902 is printed in a Collection of Burma Acts, 1899 to 1902, issued by the Government of Burma.

The differences between the Lower Burma Village system and that in force in Upper Burma are not of sufficient importance to justify the inclusion of each system in the body of this chapter. The system here described is that of Upper Burma; but statistics are given for Lower Burma as well.

ORIGIN OF THE VILLAGE SYSTEM IN UPPER BURMA.

The following Minute by Sir Charles Crosthwaite, who was Chief Commissioner of Burma from 1887 to 1889, explains the objects which it was sought to attain by the passing of the Upper Burma Village Regulation and the means which were adopted. It should be remembered that the Regulation was framed immediately after the Third Burmese War, when the Upper Province was still in a state of considerable disorder. The Minute, the first eight paragraphs of which are reproduced here *verbatim*, is dated 6th October, 1890:—

Minute by Sir Charles Crosthwaite. “The Village Regulation was drafted by me in Calcutta in the early part of 1887 and became law on the 28th October, 1887. In framing the Regulation I had two objects in view—

firstly and mainly, to preserve the village system, which in Burma, as in India, has been the basis of the indigenous administration from time immemorial; and, secondly, by using the village system, to arm the Government with sufficient powers of dealing with the universal disorder which prevailed and could not be suppressed by the ordinary law even when backed by overwhelming military force.

"2. The second object has been attained, and it has been attained only by refusing to look at the individual and by enforcing the joint responsibility of the village community. So far the bonds which unite the inhabitants of a village

**The Village System
under Native Rule.**

have been strengthened. There still remains much to be done before the village system is placed on a uniform and solid foundation, where it will be preserved from the dangers which threaten it. When the Regulation was framed it was impossible to obtain more than some very general and vague information respecting the system existing in Upper Burma. It was known that there was generally a headman to each village, who had certain authority and responsibility, and to whom the Government looked both for the payment of the revenue, for the preservation of order, and for the detection and suppression of crime. It was known also that in some places there were other local officials of superior grades who to some extent superseded and supervised the village headmen. But there was little else accurately known. The Regulation was consequently so framed as to leave the Administration a free hand in dealing with details.

"3. The leading principle was, however, laid down in unmistakable terms as follows: 'The Deputy Commissioner shall appoint a headman in every village or group of villages.' The words 'group of villages' were added because it was known that there were in many cases small villages within sight or hail of each other which could conveniently be governed by one headman. In such cases it is useless and inconvenient to multiply headmen, and it makes the task of remunerating them—in any case a hard one—still more difficult.

"4. Provision was made for maintaining any custom existing as to the appointment of headmen, and in order to prevent an interregnum pending the appointment of headmen by the Deputy Commissioner all those existing, under whatever name, at the commencement of the Regulation were confirmed in their posts. It was known, as has been said above, that in some places there were within the same locality several head-

men or local officials of various grades. Power was therefore taken to enable the Deputy Commissioner to decide in such cases 'which of them shall be the headman for the purposes of the Regulation,' and to define their relations to each other by rule with the view of preventing the mischief arising from divided authority. It will be observed that, while the existence of headmen of various grades within the same local area was recognised and power taken to deal with such cases, only one person was permitted to be headman under the Regulation, and no authority was given to the Deputy Commissioner to appoint two or more headmen to any village or group of villages or subordinate to other headmen hitherto independent. [Sic in *Upper Burma Village Manual*. It seems probable that the intention of the writer was that the sentence should end thus:—"any village or group of villages hitherto independent or subordinate to other headmen."]

"5. If attention is given to section 4 and the following sections, in which the duties of the headman are defined, it will

Village Headmen. be evident that they are of such a nature as to be incapable of being performed except by a person residing in or near the village and possessed of local knowledge and information. The Regulation assumes that the headman lives among his people and must know all that is going on about him. The responsibility imposed on him is unreasonable on any other supposition. In framing the Regulation I had always present to my mind the evils which have arisen in Lower Burma from the subordination of the village system to the system of revenue circles. No one who has been brought face to face with the difficulties of police and criminal administration in Lower Burma can fail to perceive how completely all traces of village responsibility have been lost, and how hopeless it is to expect assistance from the *taik* or circle *thugyi*, who has a large number of villages under him and cannot be expected to possess either minute local knowledge or personal influence in every part of his circle. Consequently the *thugyi* has gradually fallen out of the place which he should occupy in the administrative system. On the other hand, the *kyedangyis*, who were intended no doubt to supply this defect, have been invested with no powers, have been subordinated to the police, and deprived of all status as revenue officials. They have become in consequence mere village drudges without power or influence. In the Upper Burma Regulation no powers have been given to Deputy Commissioners to appoint circle officers under whatever name.

"The Regulation contemplates that the village shall be the administrative unit in every respect; and it requires the Deputy Commissioner to appoint a headman to every village, except in those cases where several villages are so situated that they

Leading Principle
of the System.

can be grouped under one headman without interfering with his responsibility or the efficient discharge of the duties required of him under the Regulation. This is the leading principle of the Regulation. This simple system contemplated by the Regulation and necessary for the due enforcement of village responsibility, has from various causes lost its primitive form in some places and has been replaced by a somewhat complicated hierarchy of officials, which renders it difficult to carry out the policy which has been approved by the Government.

"6. The inquiry made under the orders of the Financial Commissioner as contained in his Circular No. 125 of 1888 has

resulted in showing in a clear light the existing conditions and the difficulties encountered. In paragraph 2 of his letter No. 177-133R., dated the 8th July 1890, the Financial Commissioner observes 'that there is great diversity of practice as regards the appointment of village headmen in the different districts of Upper Burma. In some instances these diversities are due to the custom found in existence at annexation and in others to the idiosyncrasies of individual Deputy Commissioners, some of whom have engrafted on the Upper Burma stock the Lower Burma village system.'

"Thus two causes have been at work to disturb and complicate the more simple organisation which was everywhere, as it is now in most places, the framework of the Government. Under the King's rule the central authority was at times very weak. Any one who had money and could bribe the local officials or make interest at Court could get what he wanted. There were in some parts of the country officials of various kinds and known by various names, *myothugyis* or officers of townships, *myingaungs* or cavalry leaders, *thwethaukgyis* or blood-drinkers, supposed to have had some military duties. These officers, although in some cases their duties belonged to another sphere, have contrived to overshadow the village headmen, and have usurped much, if not all, of their power and emoluments, while leaving to them all that was laborious or unpleasant in their duties. Another cause which had led to the same result was the anarchy and disorder that prevailed for a considerable time prior to the annexation. Villages grouped them-

selves for protection under a *thugyi* or *myothugyi* who showed himself able to hold his own against the bands of robbers who preyed upon the people. Circles were thus formed in a manner analogous to that in which some of the talukas in Oudh were created. In return for the protection given the emoluments of the village headmen passed to the leading *thugyi*.

"Besides these complications inherited from the Native Government we have others created by our own officers. Some of the District Officers, coming fresh from Lower Burma, not unnaturally sought to introduce the only system with which they were familiar, and which from a purely revenue point of view may have its advantages. Before the Village Act was passed and the control of the Commissioners could be felt village headmen were abolished or set aside in favour of circle *thugyis* after the Lower Burma fashion, to whom was given the commission belonging rightfully to the village headmen. Even since the policy of the Government has been made known some officers have been unable to refrain from creating circles or enlarging the charges of *thugyis* whenever an opportunity has arisen, in some cases without any useful result.

"7. There is no doubt that the village headmen who have been set aside are discontented and that in some cases they are unwilling to serve. It may be said that those who had lost their position in former times have nothing to complain of. It must be remembered, however, that our Government is a real living power, which enforces its orders and exacts the responsibilities which it imposes. A man may have been willing to be village *thugyi* in Burman times even although the commission was taken by some one else. He could generally manage to appropriate some of the revenue. He got fees for deciding civil cases. And he could easily evade his duties if he made himself agreeable to his superiors. Now, while the sources of his income are wholly or partially closed, the performance of his duties is rigidly exacted. In the case of men who have been recently reduced by the action of our officers to a subordinate and unremunerated office the reasons for discontent are still stronger.

"8. I regard this state of things as a very real and immediate danger to the administration of the country. I think that

The Village and
not the Individual
to be the Unit.

most officers will now admit that the policy of dealing with the people by villages and not by individuals has been a very powerful instrument for suppressing disorder and establishing our authority. It would not have been

possible to use this instrument if the village system had no vitality. If we are to rule the country cheaply and efficiently, and to keep the people from being robbed and oppressed by the criminal classes, the village system must be maintained in vigour. It cannot thrive or live unless the post of headman is sought after or at least willingly accepted by respectable persons."

THE UPPER BURMA VILLAGE REGULATION.

The following brief summary sufficiently indicates the general character of the Upper Burma Village Regulation. Further details are given in the section of this chapter headed "Village Headmen and their Duties."

The Deputy Commissioner of each district must appoint a headman in every village or group of villages in his district, and in so doing he must, as far as circumstances permit, have regard to any established custom which may exist respecting the right of nomination or succession or otherwise and to claims based thereon.

The headman is known by the title of *ywathugyi*, and, if he is headman of more than one village, he may, subject to the approval of the Deputy Commissioner, appoint an agent for each village, such agent bearing the title of *ywagaung*. When in any village or group of villages there are two or more headmen, one of whom by custom exercises authority over the other or others, the Deputy Commissioner decides which of them is the superior, and such superior headman bears, for the purposes of the Regulation, the title *myothugyi*. The *myothugyi* controls the headmen in his jurisdiction and is responsible for their good conduct.

The following table shows the number of headmen employed in Burma during the year 1904, the number exercising special civil and criminal powers, and the discipline of the body:—

(Table on next page.)

NUMBER, POWERS, AND DISCIPLINE OF HEADMEN, 1904.

Divisions.	Total Number of Headmen.	Number exercising Special Criminal Powers.	Number exercising Special Civil Powers.	Number of Headmen.			
				Dis- missed.	Sus- pended.	Fined.	Re- ward.
<i>Lower Burma:</i>							
Arakan	1,986	61	71	28	2	16	28
Pegu	2,674	87	117	47	6	295	237
Irrawaddy	2,841	163	222	66	4	174	179
Tenasserim	1,861	28	108	12	6	49	35
Total	9,362	339	518	153	18	534	479
<i>Upper Burma:</i>							
Minbu	2,752	32	106	58	14	157	82
Mandalay	1,629	53	54	14	6	49	9
Sagaing	2,309	79	97	27	1	69	14
Meiktila	2,387	72	48	28	3	186	41
Total	9,077	236	305	127	24	461	146
Grand Total, Burma,	18,439	575	823	280	42	995	625

In addition to the specified duties referred to in the following section, village headmen are invested with certain powers

Criminal Jurisdiction of criminal and civil jurisdiction. If any of the offences mentioned below is committed in a village, the headman

of the village may, on complaint made to him within eight days from the date of the commission of the offence, take cognisance of it and try any person accused thereof:—(a) assault; (b) theft, when the value of the property stolen does not exceed five rupees; (c) mischief, when the mischief causes damage to an amount not exceeding five rupees; (d) criminal trespass; (e) insult calculated to provoke breaches of the peace; (f) doing any obscene act in a public place, singing, reciting, or uttering any obscene song, ballad, or words to the annoyance of others in or near a public place; (g) appearing in a state of intoxication in any public place or in any place where it is a trespass in them to enter, and there behaving in such manner as to cause annoyance to any person.

If the headman convicts the accused, he may fine him any

sum not exceeding Rs. 5, or, in cases of theft or mischief, not exceeding twice the value of the stolen property or the amount of the damage; or he may confine him for not more than twenty-four hours; or he may both fine and imprison him to the above extent. The headman may take and keep a fee of one rupee from the complainant in each case.

A headman specially empowered by the Lieutenant-Governor may also try cases of theft or mischief when the value of the property stolen or the amount of damage does not exceed Rs. 50, and may in any case so triable by him sentence the accused, on conviction, to a fine not exceeding Rs. 50 or to confinement for a term not exceeding fifteen days, or to both. A headman specially empowered as above may take and keep a fee of Rs. 2 from the complainant in each case.

The Local Government may, by notification in the official *Gazette*, invest any headman with the powers of a Civil Court for the trial of suits between persons, of whom both or all, as the case may be, reside within his village or group of villages, and may, by general or special order notified in the official *Gazette*, specify the classes and the value, not exceeding twenty rupees, of the suits which such headmen may try. The Local Government may at any time cancel or vary any such notification or order. In any suit tried in exercise of powers conferred as above the decision of the headman is final, subject to the revision of the Subdivisional Officer, or, where there is no Subdivisional Officer, of the Deputy Commissioner.

A fee of ten per cent. of the value of the suit must be paid on its institution before a headman, and no other fee can be claimed for the issue of processes or otherwise. No person, however, is bound to institute his suit before a headman; he may take it before the regular judicial tribunal of his locality.

The following table shows the fines inflicted by headmen and the result of the revision of headmen's orders by superior authority during 1904. It is interesting to note that of the 13,859 cases presented for revision the order of the headman was confirmed in 13,392 instances, in other words in only 3.4 per cent. of the cases reviewed was the order of the headman reversed or modified.

(Table on next page.)

RETURN OF FINES INFLICTED BY HEADMEN AND OF THE REVISION
OF HEADMEN'S ORDERS IN 1904.

Districts.	Fines inflicted by Head- men and recorded in the Treas- ury. (Rupees.)	Number of Cases examined.	Number of Cases in which the Original Order was		
			Confirmed.	Revised.	Modified.
<i>Lower Burma:</i>					
Arakan	5,010	169	144	20	4
Pegu	35,797	1,654	1,610	30	26
Irrawaddy	31,905	8,795	8,686	83	26
Tenasserim	8,388	900	861	36	3
Total	81,100	11,518	11,301	169	47
<i>Upper Burma:</i>					
Minba	14,167	990	883	99	8
Mandalay	3,705	225	192	27	6
Sagaing	9,119	510	473	27	10
Meiktila	13,127	616	543	31	41
Total	40,118	2,341	2,091	184	65
Grand Total, Burma . .	121,222	13,859	13,392	353	112

The Deputy Commissioner may, with the sanction of the Commissioner, impose fines on all or on any residents of a village if after inquiry he has found:

Responsibility of Villagers in Regard to Crime. —(a) that they have colluded with or harboured or failed to take all reasonable measures to prevent the escape of any criminal; (b) that they have suppressed or combined to suppress evidence in any criminal case; (c) that stolen property having been tracked to their village, they have failed or neglected to restore the property or to take on the track beyond the limits of their village. When a fine is imposed on the ground stated in (a) or in (b) and the offence of which the criminal is accused or to which the criminal case relates is mischief by fire, dacoity, robbery, or cattle theft, or when a fine is imposed on the ground stated in (c), a sum not exceeding the amount of the damage caused or the value of the property stolen may be given out

of the fine as compensation to the owner of the damaged or stolen property.

When within any village a person is dangerously or fatally wounded by unlawful attack, or the body is found of a person believed to have been unlawfully killed, the residents of the village are deemed to have committed an offence rendering them liable to fine unless they can show that they had not an opportunity of preventing the offence or of arresting the offender, or have used all reasonable means to bring the offender to justice.

The following table shows the extent to which the power of fining villages has been exercised during the last two years for which the figures are available:—

RETURN OF FINES IMPOSED ON VILLAGES UNDER THE LOWER BURMA VILLAGE ACT OR UNDER THE UPPER BURMA VILLAGE REGULATION, 1903, 1904.

Division.	Fines for having colluded with or harboured or failed to take all reasonable measures to prevent the escape of criminals or for having suppressed evidence in criminal cases.				Fines in cases in which stolen property having been tracked to a village the villagers have not restored the property or taken on the track beyond the village limits.			
	1903.		1904.		1903.		1904.	
	Number of villages fined.	Amount of fine. (Rupees.)	Number of villages fined.	Amount of fine. (Rupees.)	Number of villages fined.	Amount of fine. (Rupees.)	Number of villages fined.	Amount of fine. (Rupees.)
<i>Lower Burma:</i>								
Arakan . . .	19	7,569	15	2,678	—	—	—	—
Pegu . . .	37	10,351	60	14,097	41	7,361	43	6,174
Irrawaddy . .	53	9,173	61	16,731	8	1,376	3	325
Tenasserim . .	15	5,035	24	6,835	8	380	3	620
Total . . .	124	32,328	160	40,861	57	8,917	49	7,119
<i>Upper Burma:</i>								
Minbu . . .	18	4,334	25	6,971	21	3,697	14	2,879
Mandalay . . .	9	378	5	915	3	200	3	251
Sagging . . .	9	1,752	11	3,144	4	141	8	628
Meiktila . . .	16	5,509	38	7,821	25	1,999	32	3,576
Total . . .	52	12,603	79	18,851	53	5,437	57	7,334
Grand Total, Burma . .	176	44,931	239	59,712	110	14,354	106	14,453

VILLAGE HEADMEN AND THEIR DUTIES.

The headman is appointed by the Deputy Commissioner, and receives an appointment order under the Deputy Commissioner's signature. The area under him includes the lands belonging to his village. The Deputy Commissioner will inform the headman as to the limits of his jurisdiction, if there is any doubt. The headman must reside within his jurisdiction.

Appointment of
Headmen and their
Local Jurisdiction.

Headmen do not receive fixed salaries. When they collect the revenue of the village, they receive commission on the amount collected. They are not entitled to pension. Any remuneration received by a headman is not liable to attachment by a Civil Court and cannot be assigned by the headman to any one else.

Remuneration of
Headmen.

Every headman is entitled to carry a silver-mounted *da*, and headmen who are selected by the Deputy Commissioner are also entitled to have a red umbrella carried before them as the insignia of their office. All headmen are entitled to attend durbars in their districts held by His Honour the Lieutenant-Governor. In appointing a new headman, hereditary claims are taken into consideration.

Insignia of Office.

If a headman holds charge of more than one village, he may, subject to the approval of the Deputy Commissioner, appoint for each village a person to be his agent. This person shall be called *ywagaung*. The *ywagaung* has not the powers of a headman. He is subordinate to the headman and is bound to assist the headman in the execution of his public duties. A *Myothugyi* controls headmen in his jurisdiction and is responsible for their good conduct. They are subordinate to him and bound to obey his lawful orders.

Ywagaungs and
Myothugyis.

In all Municipal and Government schools the sons or male heirs of headmen who are too poor to pay fees are admitted as free scholars; and in vernacular aided schools, in such cases, the fees are paid by the Deputy Commissioner.

Education of Sons
of Headmen.

Any headman who neglects his duties or abuses his powers may be fined up to Rs. 50, or suspended for not more than six months, or dismissed, by the Deputy Commissioner.

Liability for Neglect.

The headman may call upon any person living in his village to assist him in performing his public duties. The headman

Power of Headman to enforce his Order. may fine any person who without reasonable excuse refuses or neglects to assist him in his public duties when

so required Rs. 5, or may confine him for twenty-four hours, or inflict both these penalties. If the headman thinks this punishment insufficient, he may complain to a Magistrate in order that heavier punishment may be inflicted.

The headman must without delay send to the nearest Magistrate, or the nearest police station or outpost, or to the Officer

Duty of Headman in Respect of Reporting Crime. Commanding troops in a military post, information—(a) if any notorious receiver or vendor of stolen property lives in or comes to stay for a time in his village; (b) if any

person known or believed to be a dacoit, robber, escaped convict, or proclaimed offender, passes through or comes to the village; (c) if any one commits or attempts or intends to commit—(1) homicide; (2) dacoity; (3) robbery; (4) an offence against the Arms Act; (5) any other offence which the Deputy Commissioner may order the headman to report; (d) if any sudden, unnatural, or suspicious death occurs in the village.

The headman must inquire into any of the above-mentioned offences committed in his village, and must search for and

Duty of Headman as to Investigation of Crime and Arrest of Offenders. arrest any person who commits or attempts to commit any of those offences. He must try to recover any property taken by robbers or dacoits.

He must arrest any person lurking in the village who cannot give a satisfactory account of himself.

He may search for and arrest—(1) any person known or believed to be concerned in an offence for which a police officer may arrest without warrant; (2) any person having in his possession without excuse an implement of house-breaking; (3) any proclaimed offender; (4) any person in possession of stolen property and suspected of having come by it unlawfully; (5) any person who obstructs a police officer in the execution of his duty; (6) any escaped prisoner or deserter from the Army or Navy.

He must without delay send to the nearest police station or outpost any one whom he has arrested and any weapon or other article required as evidence. He should inform the beat constable of all serious offences.

The headman must resist any unlawful attack on his village,

and he must take such measures and execute such works for the protection of the village as the Deputy Commissioner may direct. The rules for the action to be taken in resisting robbers and dacoits vary in different districts and will, if necessary, be separately supplied by the Deputy Commissioner.

The headman must keep open communications between his village and neighbouring military or police posts in such way as the Deputy Commissioner may direct.

He must collect and furnish, upon receipt of payment in advance of rates fixed by the Deputy Commissioner, guides, food, carriage, and means of transport for troops or police posted in or near or marching through his village, or for any Government servant travelling on duty, or, if so ordered by the Deputy Commissioner, for any traveller. He is not bound to collect supplies beyond the limits of his village, or to furnish carriage or means of transport for more than twelve hours' journey from the village. He must not call out for personal service people who are not of the labouring class or who are not accustomed to the work required. If so directed by a Magistrate, he must furnish labourers for making or repairing roads, embankments, or other public works.

All village headmen are Excise Officers. Those whose remuneration equals or exceeds Rs. 120 a year exercise enlarged powers. Each headman should have an appointment order as excise officer, showing whether he excises these enlarged powers or not. The duties of headmen under the Excise and Opium Acts are described below. Headmen are empowered to enter and inspect at any time, by day or by night, the shop or premises in which any manufacturer or vendor licensed under the Excise Act carries on the manufacture or the sale of country spirits or the sale of country fermented liquor.

Headmen may stop and detain any person carrying any spirits manufactured at an unlicensed distillery or any spirits removed from any licensed distillery without payment of duty, or any spirit or fermented liquor manufactured at any place beyond the limits of British India on which duty has not been paid, or any country spirits in excess of one reputed quart bottle; or any country fermented liquor or tari in excess of the four reputed quart bottles, unless the carrier has a pass signed by the Township Officer, Subdivisional Officer or Deputy

Commissioner; or any opium in excess of the weight allowed by law; or any opium which the person possessing it has bought except for medicine from any person other than a licensed vendor or any ganja or other intoxicating drug, and may seize such smuggled spirits, liquor, tari, opium, or drug, together with any vessels, packages, or coverings in which it is contained, and any animals and conveyances used in carrying it, and may arrest the persons in whose possession such spirit, liquor, tari, opium, or drug, is found: and may also arrest any other persons in the company of the person in whose possession illicit opium is found.

If any headman has reason to believe from personal knowledge or from information given by any person, and taken down in writing, that opium is manufactured, or that illicit opium is kept or concealed in any building, vessel, or enclosed place, he may, without a warrant, between sunrise and sunset, enter into any such building, vessel, or place, and may, in case of resistance, break open any door and remove any obstacle to such entry, and seize any such opium and all materials used in the manufacture thereof, and any other thing which he has reason to believe to be liable to confiscation under any law in force relating to opium, and detain and search and, if he thinks proper, arrest any person whom he has reason to believe to be guilty of any offence relating to such opium.

Searches for unlawfully manufactured or concealed spirituous and fermented liquors and intoxicating drugs liable to confiscation under the Excise Act may, in like manner, be made by any headman whose annual remuneration is not less than Rs. 120, upon information given by any person and taken down in writing that spirit or fermented liquor is unlawfully manufactured or concealed in any house, vessel, or enclosed place, and the headman may arrest the occupant or other persons concerned in the manufacture or keeping or concealing such spirit or fermented liquor, and may seize and carry away such spirit, liquor, or other article liable to confiscation under the Excise Act. All searches under this rule must be made in the presence of an officer of police in receipt of a monthly salary of at least Rs. 10.

Before making any search for illicit opium,* the headman

*The rule about possession of opium is as follows:—

Any person may possess, if bought from a doctor, and if intended for medicine only, not more than five seers of poppy-heads, three tolas of opium, or six tolas of a medical preparation of opium. Any son-Burman may possess, if bought from a Government depot or licensed vendor, five seers of poppy-heads or three tolas of Government opium.

Pharmacists, doctors, and tattooers have special privileges. They are required to have licenses in which their privileges are specified.

In certain tracts the cultivation of the poppy is permitted, and there are special rules about possession of poppy-heads and opium.

shall call on two or more respectable inhabitants of the locality in which the place to be searched is situate to attend and witness the search. The search shall be made in their presence, and a list of all things seized in the course of such search and of the places in which they were respectively found shall be prepared by the headman and signed by such witnesses; but no person witnessing a search under this rule shall be required to attend the Court as a witness of the search unless specially summoned by the Court.

The occupant of the place searched, or some person on his behalf, shall be permitted to attend during the search, and a copy of the list prepared under this rule, signed by the said witness, shall be delivered to such occupant or person at his request.

Whenever a headman arrests any person, or seizes any article liable to confiscation, or enters any place for the purpose of searching for such article, he shall (within forty-eight hours in opium cases or twenty-four hours in liquor cases) make a full report of all the particulars of such arrest, seizure, or search to the Township Officer, and shall forward every person arrested and everything seized without delay to the officer in charge of the nearest police station in opium cases and to the Township Officer in liquor cases.

Headmen have important duties to perform in regard to the prevention of fires, village sanitation, the cure and prevention of contagious or infectious diseases amongst cattle. The following rules relating to the above matters are reprinted from the *Upper Burma Village Manual*.

**Duties in Regard to
Sanitation, Fires, and
Cattle Disease.**

In addition to the general rules here reprinted the Manual contains detailed instructions in regard to the maintenance of a Village Sanitary Inspection Book and of a Permanent Sanitary Record in forms prescribed by the Government.

Rules regarding Village Sanitation, Slaughter of Cattle, and the Prevention of Fires.

The following rules have been issued under the provisions of section 5 (l) of the Upper Burma Village Regulation by Commissioners of Divisions:—

1. The headman shall not allow any house or land in any village under his control to be, or to be kept, in a filthy or insanitary condition, or to be overgrown with weeds or rank vegetation.
2. The headman shall not allow the corpse of a human being, unless embalmed or unless enclosed in an air-tight coffin, to be kept unburied or uncremated for more than 48 hours on any house or land in any village under

his control without the special sanction in each case of the Deputy Commissioner, Civil Surgeon, Subdivisional Officer or Township Officer: Provided that between the first day of November and last day of February inclusive, corpses may be kept unburied or uncremated for 72 hours.

3. The headman shall not allow the corpse of a human being who has died of cholera, small-pox, or other infectious or contagious disease, to be kept for more than six hours unburied or uncremated on any house or land in any village under his control.

4. The headman shall not allow the burning or burying of the corpse of a human being in, or the depositing of the same at, any place in any village under his control except a public burial-ground, or a place set apart for that purpose by the Civil Surgeon or the Township Officer.

5. The headman shall at once send a report to the nearest police station or outpost of the occurrence in any village under his control of cholera or small-pox if two cases occur in close succession.

6. When a corpse is interred, it shall be buried at a depth of at least 5 feet, and not within 30 yards of any well, tank, or stream, or of any dwelling-house, and the headman exercising control over the village where the interment takes place shall satisfy himself that this is done. No corpse shall be thrown into a river, creek, or water of any kind.

7. The headman shall not allow any latrine or cess-pit on any house, enclosure, or land in any village under his control to be kept in a filthy or insanitary condition. Cess-pits shall be closed periodically.

8. The headman shall set apart in each village under his control one or more wells for drinking purposes, and shall cause to be constructed round each well a parapet 2 feet high, and shall not allow bathing or washing of clothes within 20 yards of any such well, and shall not allow the ground within 20 yards of such well to be defiled by filth, or rubbish or otherwise. If the water-supply is from tanks, the headman shall reserve one tank for drinking purposes only, shall keep clean the banks thereof, and shall not allow bathing, washing of clothes, or watering of cattle in it.

*8A. The headman shall not, without the special sanction of the Deputy Commissioner, or Subdivisional Officer, or Township Officer allow cattle (which term includes sheep, goats, and swine, as well as horned cattle) to be slaughtered (except in a slaughter-house established by the Deputy Commissioner) or their carcasses to be exposed for sale in any village under his control otherwise than in accordance with a license granted by the Deputy Commissioner.

^b8A. The headman shall not, without the special sanction of the Deputy Commissioner, Subdivisional Officer, or Township Officer, allow cattle (which term includes goats and swine, as well as horned cattle) to be slaughtered or their carcasses to be exposed for sale within the limits of his village otherwise than in accordance with a license granted by the Deputy Commissioner and only in such localities as may be fixed for the purpose by the Deputy Commissioner.

^c8A. The headman shall not, without the special sanction of the Deputy Commissioner or Subdivisional Officer, allow cattle (which term includes goats and swine besides horned cattle) to be slaughtered or their carcasses

to be exposed for sale in his village otherwise than in accordance with a license granted by the Deputy Commissioner.

^d 8A. When a slaughter-house has been provided for any village the headman of that village and of adjoining villages shall not, within a radius of three miles from the slaughter-house, without the special sanction of the Deputy Commissioner or Subdivisional Officer, allow cattle (which term includes sheep, goats, and swine, as well as horned cattle) to be slaughtered or their carcasses to be exposed for sale in their villages otherwise than in accordance with a license granted by the Deputy Commissioner.

* 8A. The headman shall not, without the special sanction of the Deputy Commissioner or Subdivisional Officer, allow cattle (which term includes goats and swine besides horned cattle) to be slaughtered or their carcasses to be exposed for sale in his village otherwise than in accordance with a license granted by the Deputy Commissioner.

[NOTE. These five sections numbered 8A apply severally to various groups of villages, according to local conditions.]

9. The headman shall see that all latrines in each village under his control are screened by a sufficient roof and wall from the view of passers-by or persons residing in the neighbourhood.

10. The headman shall cause the streets and lanes in each village under his control to be kept free from weeds, in good order, and in a sanitary condition.

11. The headman shall mark out a place near, but outside, each village under his control where rubbish may be deposited, and shall cause the rubbish to be burnt or worked into the land at ploughing time.

12. The headman shall not allow a new house to be built in any village under his control within 20 feet of the front or back, or 6 feet of the side, of any existing house.

13. The headman shall cause each house-owner or occupier in each village under his control to maintain two hooked bamboos, two fire-beaters, and as many pots filled with waters as there are front posts of his house.

14. The headman shall see that fires or lights are not ignited, handled, or used in any village under his control in such a manner as to be dangerous to life or property. In really serious cases, or where a fire results from careless action on the part of any of the villagers, he shall send a report of the matter to the nearest Magistrate or Police Officer.

Rules for the Prevention of Cattle Disease.

I.—The village headman shall from time to time proclaim to all persons resident in his village that they are required to report to him the outbreak of any contagious or infectious disease among cattle in the village or in any neighbouring village which may come to their knowledge.

II.—The village headman shall direct every cattle-owner that, on the appearance of any contagious or infectious disease among his cattle, such cattle-owner shall (a) keep the diseased cattle in a place apart from all other cattle and distant from the places whither the other cattle usually resort;

(b) if the disease be rinderpest, keep all other cattle which have been in the same herd with the diseased animal in a place such as aforesaid; and (c) report appearance of the disease immediately to him.

III.—A village headman, on learning from the report of a cattle-owner or otherwise of the breaking out of contagious or infectious disease in the village or villages under his charge, shall (1) within 24 hours send a written report of the fact to the Township Officer, or to the Subdivisional Officer or Deputy Commissioner if either of these officers is nearer than the Township Officer; (2) if there is any waste land or grazing-ground in or near the village, at once set apart places for diseased cattle, and, if the disease be rinderpest, places for cattle which have been in the same herd with diseased cattle; (3) cause the place or places so set apart to be enclosed; or (4), if no waste land or grazing-ground is available for an enclosure, state the fact in his report.

IV.—The village headman shall order every cattle-owner in the village or villages in which the contagious or infectious disease has broken out (a) to keep his diseased cattle, and, if the disease be rinderpest, his other cattle which have been in the same herd with diseased cattle in the places set apart for the same, unless and until other places are set apart for the purpose by the Deputy Commissioner or other officer appointed by him; (b) to give him such assistance as he may require in enclosing the place or places set apart for diseased cattle.

V.—The village headman, after making the report prescribed in Rule III. and after receiving an order directing an examination of the village cattle, shall cause all cattle-owners in the village to bring their cattle for the inspection of the officer appointed by the Deputy Commissioner, Township Officer, or Subdivisional Officer, to examine them, to such place as the examining officer may direct. He shall give such officer all reasonable assistance in the inspection. He shall be careful that the diseased cattle are not herded together with the rest of the cattle at the inspection.

VI.—The headman of any village in which contagious or infectious disease has broken out shall, on receiving orders from the Deputy Commissioner or Subdivisional Officer or Township Officer, set apart for diseased cattle, or, if the disease be rinderpest, for cattle which have been in the same herd with diseased cattle, such places as may be ordered, and shall require every cattle-owner of the village to keep his diseased cattle, and, if the disease be rinderpest, his cattle which have been in the same herd with diseased cattle, in places so set apart and not to remove the cattle from these places without his permission, which permission he shall not grant without the written order of the Deputy Commissioner or an officer authorised by the Deputy Commissioner.

VII.—The headman of any village in which contagious or infectious disease has broken out shall, on receiving orders from the Deputy Commissioner, Subdivisional Officer, or Township Officer, require the cattle-owners of the village to make at their own expense such sheds, enclosures, or other structures as are ordered for the proper isolation of diseased cattle.

VIII.—In any village in which contagious or infectious disease has broken out, the headman shall cause all dung, hay, straw, litter, refuse, or other

thing which has been, or which may have been, in contact with a diseased animal to be burnt by the cattle-owner.

IX.—If a diseased animal dies in any village in which contagious or infectious disease has broken out, the headman shall order the owner of the dead animal to bury within 12 hours after death the carcass at, or as near as possible to, the spot where the animal died, but not less than 300 yards from any houses, cattle-pens, and customary watering-places of the village and at a depth below the surface of not less than 6 feet. The carcass shall be buried with the hide and the horns, and after the carcass has been put in the ground the hide shall be slashed so as to render it unfit for tanning or any other use. But if by reason of flood or for any other cause it is not possible to bury the carcass, it shall be burnt.

X.—The village headman shall from time to time proclaim in the village that any cattle-owner or other person being bound to report the outbreak of contagious or infectious disease or death of cattle, who neglects to do so, or who disobeys the order of the headman under any of the foregoing rules, is liable to punishment under section 8 of the Upper Burma Village Regulation.

Headmen of villages collect the *thathameda* and receive commission at rates fixed by the Financial Commissioner. In

Duties of Headmen
as Revenue Officers.

some villages the headman also collects land revenue or irrigation rate and gets commission thereon.

The headman is required to sign the report of the Revenue Surveyor or District Surveyor on the condition of the land for which a grant is required, and should add any remarks he wishes to make.

The headman shall, when ordered by the Township Officer, affix notices calling for objections to a grant of land on the land itself and on his own house, and, in case there are any detached villages or hamlets under his charge, on the *Ywagaung's* houses in such villages or hamlets.

The headman shall periodically inspect the regularly notified grazing-grounds and cattle-paths in his village in order to see that no encroachments are made on them by cultivators or others. If the headman finds that any one has encroached and will not give up the land when called upon to do so, he should at once report the case to the Township Officer. The headman shall, when required, affix to his house such notices as the Deputy Commissioner may issue with respect to proposed grazing-grounds in the vicinity of his village.

The headman shall periodically inspect the lines of public roads and embankments in his village in order to see that no encroachments are made on them by cultivators or others. If

thing which has been, or which may have been, in contact with a diseased animal to be burnt by the cattle-owner.

IX.—If a diseased animal dies in any village in which contagious or infectious disease has broken out, the headman shall order the owner of the dead animal to bury within 12 hours after death the carcass at, or as near as possible to, the spot where the animal died, but not less than 300 yards from any houses, cattle-pens, and customary watering-places of the village and at a depth below the surface of not less than 6 feet. The carcass shall be buried with the hide and the horns, and after the carcass has been put in the ground the hide shall be slashed so as to render it unfit for tanning or any other use. But if by reason of flood or for any other cause it is not possible to bury the carcass, it shall be burnt.

X.—The village headman shall from time to time proclaim in the village that any cattle-owner or other person being bound to report the outbreak of contagious or infectious disease or death of cattle, who neglects to do so, or who disobeys the order of the headman under any of the foregoing rules, is liable to punishment under section 8 of the Upper Burma Village Regulation.

Headmen of villages collect the *thathameda* and receive commission at rates fixed by the Financial Commissioner. In

Duties of Headmen
as Revenue Officers.

some villages the headman also collects land revenue or irrigation rate and gets commission thereon.

The headman is required to sign the report of the Revenue Surveyor or District Surveyor on the condition of the land for which a grant is required, and should add any remarks he wishes to make.

The headman shall, when ordered by the Township Officer, affix notices calling for objections to a grant of land on the land itself and on his own house, and, in case there are any detached villages or hamlets under his charge, on the *Ywagaung's* houses in such villages or hamlets.

The headman shall periodically inspect the regularly notified grazing-grounds and cattle-paths in his village in order to see that no encroachments are made on them by cultivators or others. If the headman finds that any one has encroached and will not give up the land when called upon to do so, he should at once report the case to the Township Officer. The headman shall, when required, affix to his house such notices as the Deputy Commissioner may issue with respect to proposed grazing-grounds in the vicinity of his village.

The headman shall periodically inspect the lines of public roads and embankments in his village in order to see that no encroachments are made on them by cultivators or others. If

of the mark to be protected, or, in the case of marks situated away from cultivation, by such of the villagers as he may choose.

The headman collects all land-revenue and fruit-tree assessments due from his village. He will receive tax tickets in official form from the Deputy Commissioner's office and, when he has not prepared the assessment-roll himself, he will also receive a list of the persons from whom revenue is due and the amount due from each, and will be informed of the date on which the revenue is to be paid to the Township Officer.

The headman will proceed to collect the amount due from each person according to the above list, and on payment by any person of amount due by him the headman will fill in and give to him a receipt in official form.

When any person has failed to pay the revenue due by him on or before the date fixed for the payment of such Revenue, the headman shall at once report to the Township Officer the name of the person from whom the revenue is due and the amount and kind of revenue due.

If a defaulter afterwards pays the revenue due from him together with the costs in the case, the headman shall at once inform the Township Officer of the payment and shall set at liberty the defaulter, if he has been arrested.

Every year, on or before such date as the Deputy Commissioner may fix, the headman shall prepare a list of all the households in his village and shall submit the list to the Township Officer. After the list has been checked by the Township Officer and Subdivisional Officer it will be submitted to the Deputy Commissioner, and will then be returned to the headman, who will be informed by the Deputy Commissioner of the total amount due from the village on account of *thathameda* in house-tax.

The headman and *thamadis* shall thereupon fix the amount payable by each household. The headman shall enter the amount against each household, and shall also publish in the village a list showing the amount due by each person.

When this list has been published, the headman shall proceed to collect the amount due from each household, and shall give a receipt in official form on payment by any person of the amount due from him.

The headman will be informed by the Township Officer of the date on or before which the *thathameda* must be paid, and when any person has failed to pay before that date the headman shall report to the Township Officer. If the defaulter

afterwards pays the *thathameda* and costs, the headman will inform the Township Officer.

If specially required to do so, the headman has to record changes in rights over land. Printed forms of record are supplied.

Duties in Regard to Rights over Land. The record is in triplicate and contains certain particulars concerning the village lands indicated by the column

headings. Every person acquiring, by inheritance, purchase, mortgage, gift, or otherwise, possession of land is bound to report his acquisition to the headman. Every occupier who releases any portion of his holding to a sub-tenant is bound to report the sub-tenant's name and area sublet and rent to the headman.

The headman must enter in the printed record supplied to him the reports received under the two foregoing rules and also any acquisitions or sub-lettings which he knows to have taken place, but which have not been reported. He gives the triplicate to the owner of the land, retains the duplicate for delivery to the surveyor when the surveyor visits the village, and keeps the original for his own record.

The headman must appoint village watchmen. The watchmen, when on duty at night, are allowed to go armed with spears.

Miscellaneous Duties of Headmen. The headman may allot unoccupied land for house-building, according to the orders of the Deputy Commis-

sioner, and in so doing he must refuse permission to build except within recognised village sites, and must not allow the construction of isolated huts and defenceless clusters of houses. He must supply any local information required by a magistrate or police officer; and he must assist all Government officers in the execution of their duties. In districts to which the rules for the registration of deaths have been extended the headman must act as registrar of deaths. On the occurrence of any serious failure of crops or of food-supply in any village the headman must make an immediate report to the Township Officer.

CHAPTER XVIII.

MEDICAL AND SANITARY ADMINISTRATION

REFERENCES.

- The Burma Medical Manual, containing Rules for the Management of Charitable Hospitals and Dispensaries and for the Guidance of Medical Officers under the Government of Burma. Issued under Authority Rangoon, Govt. Press, 1898, pp. 47 + cxxx (as corrected to November, 1904).
- The Burma Plague Manual, containing the Epidemic Diseases Act, 1897, and the Rules, Orders, and Notifications issued thereunder. Corrected up to the 8th of April, 1905. Second edition. Rangoon, Govt. Press, 1905, pp. ii + 173.
- Notes and Statistics on Hospitals and Dispensaries in Burma. Rangoon, Govt. Press. Annual.
- Notes and Statistics on Vaccination in Burma. Rangoon, Govt. Press. Annual.
- Report on the Sanitary Administration of Burma. Rangoon, Govt. Press. Annual.
- Report on the Rangoon Lunatic Asylum. Rangoon, Govt. Press. Annual.

CLASSIFICATION OF HOSPITALS AND DISPENSARIES.

The civil hospitals and dispensaries of Burma are divided into the following classes:—

Class I. State-public. These are institutions open to the poorer classes of the public.

Class II. State-special. These are institutions which serve only a special section of the public, such as members of the civil and military police, persons attached to the Forests and Surveys Departments, persons working on canals in the irrigation circle, and so on.

Class III. Local Fund. These are institutions which are vested in local boards or municipalities or guaranteed or maintained by local or municipal funds. The fact that these institutions may be aided by private subscriptions or may receive assistance from the Government in the shape of part of the salary of the medical officer, grants of medicine, or otherwise, is not regarded as a reason for classing these institutions otherwise than as Local Fund institutions so long as their existence is practically dependent on local funds.

MEDICAL AND SANITARY ADMINISTRATION 735

Class IV. Private Aided. Comprises institutions supported by private subscriptions or guarantee, but receiving aid from Government or local funds.

Class V. Private Non-aided. Comprises institutions maintained entirely at the cost of private individuals or associations. The fact that the Government provides superior inspection or registers is not regarded as a reason for classing such institutions as otherwise than Private Non-aided.

Class VI. Railway. Comprises all railway dispensaries.

In the *Burma Medical Manual*, "Hospital" is defined as an institution which has accommodation for in-patients, and "Dispensary" as an institution which provides outdoor relief only. The following table shows the number of institutions open during 1904 and 1905:—

NUMBER OF MEDICAL INSTITUTIONS IN BURMA.

	Open on December 31, 1904.	Opened during 1905.	Closed during 1905.	Open on December 31, 1905.
I. State-public	52	2	1	53
II. State-special:				
a. Police	37	1	—	38
b. Forests and Surveys,	—	—	—	—
c. Canals'	1	—	—	1
d. Others	4	2	1	5
III. Local Fund	78	1	1	78
IV. Private Aided	10	—	—	10
V. Private Non-aided	4	—	—	4
VI. Railway	18	1	—	19
Total	204	7	3	208

Of the total of 208 institutions open on the 1st of January, 1906, there were 161 hospitals and 47 dispensaries.

THE STAFF OF THE MEDICAL DEPARTMENT.

The principal posts in the Civil Medical Department are held by officers of the Indian Medical Service. This service is a military service; but officers who have performed two years' regimental duty in India are eligible for civil employment. Candidates for the Indian Medical Service must be natural-born subjects of His Majesty, of European or East Indian descent,

between twenty-one and twenty-eight years of age at the date of the entrance examination, of sound bodily health, and, in the opinion of the Secretary of State for India in Council, in all respects suitable to hold commissions in the Indian Medical Service. They may be married or unmarried. They must possess under the Medical Acts in force at the time of their appointment a registrable qualification to practise both medicine and surgery in Great Britain and Ireland.

Candidates who have proved possession of the foregoing qualifications are examined by a Board in the following subjects: Medicine, including Therapeutics; Surgery, including diseases of the eye; Applied Anatomy and Physiology; Pathology and Bacteriology; Midwifery and Diseases of Women and Children; Chemistry, Pharmacy, and either Botany or Zoology. No candidate is considered eligible who has not obtained at least one-third of the marks obtainable in each of the above subjects and one-half of the aggregate marks for all subjects.

After passing this examination, the successful candidates are required to attend one entire course of practical instruction at the Army Medical School and elsewhere, as may be decided, in Hygiene; Military and Tropical Medicine; Military Surgery; Pathology of diseases and injuries incidental to Military and Tropical Service. The course is not of less than four months' duration. At the conclusion of the course, candidates are required to pass an examination in the subjects taught. Officers appointed to the Indian Medical Service are placed on one list, their position on it being determined by the combined results of the preliminary and final examinations, and, so far as the requirements of the service permit, they are allowed the choice of Commands in India (*i.e.*, Eastern, Northern, and Western Commands, and Burma or Secunderabad Divisions), according to their position on the list.

There has been no difficulty in securing a supply of officers for the superior posts in the Burma Medical Department; but the recruiting of the subordinate medical staff has not hitherto produced satisfactory results either in regard to the number or the qualifications of subordinate officers. In order to overcome these difficulties and to insure a satisfactory supply of medical subordinates in the future the Government of Burma has established a Medical School for the purpose of training candidates for posts as Hospital Assistants. This institution—the Burma Government Medical School—was opened in January, 1907,

MEDICAL AND SANITARY ADMINISTRATION 737

its chief object being to supply the people of Burma with Hospital Assistants of their own nationality.

For administrative purposes the Province of Burma is divided into thirty-nine civil surgeoncies. According to the *Quarterly Civil List for Burma*, as corrected to the 1st

Civil Surgeoncies. of October, 1906, there were 2 first-class civil surgeoncies held by officers of the Indian Medical Service, 16 second-class civil surgeoncies held by officers of the Indian Medical Service, 17 second-class civil surgeoncies held by commissioned, uncovenanted, and warrant medical officers, and 4 second-class civil surgeoncies held by Burma civil surgeons.

The following table shows the monthly pay of officers of the Burma Civil Medical Department. Most of the salaries as given in the table include what is known as a Burma Allowance, of 100 rupees a month in the case of the higher appointments, and of 50 rupees a month for subordinate appointments. There are a number of other allowances, such as Jail Allowance to medical officers in charge of jails, Port Health Officer's Allowance, Travelling Allowance, Horse Allowance, and so on. These allowances are given in detail in the *Manual of Appointment and Allowances in Burma*, sixth edition, 1905. Except in the case of Jail Allowance, which amounts to as much as 250 rupees a month in some instances, allowances never exceed 100 rupees a month each; but officers may draw more than one allowance.

MONTHLY PAY OF OFFICERS OF THE BURMA CIVIL MEDICAL DEPARTMENT.

Officials.	Pay per month in rupees.	Officials.	Pay per month in rupees.
Inspector-General of Civil Hospitals*	2,250	Second-class Civil Surgeons†	400-1,200
Inspector-General of Prisons,	1,800	Assistant Surgeons†	100-300
Deputy Sanitary Commissioner	600-1,000	Local Assistant Surgeons,†	100-200
Superintendents and Medical Officers of Jails	750-1,050	Hospital Assistants‡	50-115
First-class Civil Surgeons†	950-1,300		

* He is also Sanitary Commissioner and Superintendent of Vaccination.

† According to rank.

‡ According to length of service.

In the case of medical officers who are superintendents of jails, a jail allowance is paid in addition to the ordinary Medical Service pay. The allowance varies between Rs. 50 and Rs. 250 a month. (See Vol. I p. 236.)

THE WORK OF THE MEDICAL DEPARTMENT.

The following table shows the number of patients treated for the principal diseases and injuries in all classes of hospitals and dispensaries in Burma during the last four years for which figures are available. Further details are given in Appendix B of this volume.

NUMBER OF PATIENTS TREATED FOR THE PRINCIPAL DISEASES IN THE HOSPITALS OF BURMA, 1902-05.

Nature of Disease.	1902.	1903.	1904.	1905.
Small-pox	503	277	171	1,053
Cholera	287	688	572	776
Dysentery	17,615	17,545	19,093	20,296
Malarial fever	177,692	186,622	187,219	182,677
Veneral diseases	29,096	29,759	31,657	31,951
Worms	102,010	114,440	128,222	122,690
Debility and anæmia	14,502	14,476	14,633	15,442
Rheumatic ailments	37,009	36,917	40,316	38,174
Diseases of the eye	86,496	88,597	86,273	87,539
Diseases of the ear	16,871	17,024	19,507	19,443
Tubercular diseases *	—	—	989	1,035
Diseases of the respiratory system †	—	—	89,925	88,386
Diarrhoea	21,866	23,879	24,391	25,614
Dyspepsia	55,266	60,247	64,081	65,051
Ulcers	117,074	124,335	129,047	134,423
Other skin diseases	69,994	67,265	73,135	78,090
Injuries	62,163	66,173	73,365	76,195

The number of surgical operations performed each year in the Government hospitals of Burma ranges between twenty and twenty-five thousand. The details as far as numbers and results are concerned are given in the following table, and the details of the principal operations performed in 1903 are added in a separate table. A classification of all operations performed in each year is given in *Notes and Statistics on Hospitals and Dispensaries in Burma*, which is published annually by the Government of Burma.

* A change in classification makes the figures prior to 1904 useless for purposes of comparison.

† Other than tubercle of the lung.

MEDICAL AND SANITARY ADMINISTRATION 739

Complaints have been made of the inadequate surgical equipment of the hospitals; and special expenditure has recently been incurred with the object of remedying this defect.

SURGICAL OPERATIONS PERFORMED IN THE HOSPITALS OF BURMA, 1902-05.

	1902.	1903.	1904.	1905.
Principal operations	22,299	22,955	24,102	24,367
Secondary operations	141	131	178	169
Total operations	22,440	23,086	24,280	24,536
Number of patients operated on .	22,299	22,955	24,102	24,426
Cured	21,351	22,323	23,300	23,783
Relieved	651	540	614	399
Discharged otherwise	56	61	78	113
Died	144	89	124	88
Remaining at close of year . . .	200	202	188	259

THE MORE IMPORTANT OPERATIONS PERFORMED IN THE HOSPITALS OF BURMA DURING 1905.

Nature of Operation.	Number.	Deaths.	Nature of Operation.	Number.	Deaths.
Amputations	113	10	Lithotomy	16	0
Laparotomy	34	7	Lithotripsy	5	0
Cataract extraction,	31	0	Litholapaxy	22	1
Iridectomy	22	0	Trephining	52	10
Excision of eyeball,	22	0	Oophorectomy	9	2
Herniotomy	62	3	Ovariectomy	7	1
Abscess of liver	12	5			

It is to be noted that the statistics given in the foregoing tables of operations relate only to State-public, Local Fund, and Private-aided hospitals and dispensaries, no figures being given in the official reports of operations in State-special, Private-non-aided and Railway hospitals and dispensaries.

One of the most important branches of the work of the Burma Civil Medical Department is that of vaccination. An annual Vaccination report is issued by the Government, dealing with this subject, and also a triennial report covering the work of the three years next preceding the date of issue. From these reports the following data are extracted, and further details are given in Appendix R of this volume:—

NUMBER OF PERSONS PRIMARILY VACCINATED IN THE PROVINCE OF BURMA, 1897-1905.

Official Year.	Total Number vaccinated.	Number successfully vaccinated.
1896-97	396,818	366,482
1897-98	405,928	383,748
1898-99	447,858	423,519
1899-1900	463,605	438,406
1900-01	392,719	358,055
1901-02	333,791	300,722
1902-03	355,013	308,583
1903-04	385,102	327,172
1904-05	381,090	309,365
1905-06	427,305	371,376

The number of deaths from small-pox varies greatly from year to year. The collection of statistics in regard to Upper

Number of Deaths from Small-pox.

Burma is not in a very satisfactory condition, and in the *Notes and Statistics on Vaccination in Burma* the ratio of mortality from small-pox is given for Lower Burma only. The ratio of mortality from small-pox per 10,000 inhabitants in Lower Burma during the past ten years has been as follows, the first figure being for 1896 and the last for 1905: 3.70, 4.32, 10.70, 13.21, 6.76, 4.45, 2.82, 2.30, 2.38, 10.10.

OCCURRENCE OF PLAGUE IN BURMA.

Previous to the commencement of the year 1905 the Province of Burma remained, as far as is known, free from indigenous plague; but in February, 1905, the existence of plague was discovered in Rangoon.

Prompt measures were taken with a view to eradicate the disease at the outset, but these were unsuccessful, and the plague spread to other parts of the Province.

The total attacks of plague reported in the Province during 1905 (the last year for which figures are available) were 4,132 with 3,692 deaths. It is to be noted, however, that these figures indicate a very much higher death-rate than was probably the actual case, for, whereas every death from plague came under official registration, a large number of cases of plague in which the result was not fatal were never reported.

MEDICAL AND SANITARY ADMINISTRATION 741

Full details of the system of plague administration are given in the *Burma Plague Manual*, 1905.

OCCURRENCE OF LEPROSY IN BURMA.

The total number of cases of leprosy treated in the hospitals of Burma during 1905 was 1,592. There are two asylums for lepers in Burma, one at Mandalay and the other in Rangoon. Each of these institutions is a private work of charity managed by Roman Catholic missionaries, and they dealt with 1,394 cases out of the total of 1,592.

THE RANGOON LUNATIC ASYLUM.

The Rangoon Lunatic Asylum is the only institution in the Province exclusively devoted to the care of the insane. It has accommodation for 427 inmates at 50 superficial feet per head. The asylum has been seriously overcrowded during the past few years, and a proposal has been sanctioned, and is now in course of execution, for transferring the asylum to Mandalay, where a modern structure is to be erected, capable of accommodating 550 inmates. The following table shows the principal facts of importance in regard to the lunatic asylum during the past three years:—

STATISTICS OF THE RANGOON LUNATIC ASYLUM DURING THE
THREE YEARS 1903-05.

	1903.	1904.	1905.
In asylum January 1:			
Males	366	393	390
Females	49	49	55
Total	415	442	445
Daily average strength:			
Males	380	397	396
Females	46	54	57
Total	426	451	453
Cost of maintenance per head:	Rs.	Rs.	Rs.
Establishment	41.12.7	45.0.0	78.0.0
Diet	44.4.3	58.2.9	47.9.2
Clothing and bedding	1.4.3	0.10.5	0.9.0
Country medicine	0.12.5	0.5.10	0.5.9
Contingencies	17.10.1	39.5.6	22.15.2
Total cost per head	105.11.7	143.8.6	149.7.1

EXPENDITURE ON MEDICAL AND SANITARY ADMINISTRATION.

The expenditure on medical and sanitary administration during the past few years is given in detail in Table III. of Appendix R of this volume. The expenditure under these heads in 1905 amounted to Rs. 1,139,807. This sum, however, includes on sanitation account only the cost of establishment. The outlay on sanitary works—water-supply, drainage, etc.—falls under the head Civil Public Works in the general accounts of the Province. The sum expended on Civil Sanitary Works during the past few years is given on page 744 of this volume.

SANITARY ADMINISTRATION.

Sanitary work in Burma is carried out by a variety of agencies,—Government Departments, Municipal Committees, and Town Committees. At the head of the sanitary administration is the Sanitary Commissioner,—a post which is held conjointly with that of Inspector-General of Civil Hospitals.

In order that there may be a proper degree of co-ordination between the various agencies of sanitary administration and for the purpose of placing at the disposal of all sanitary authorities the best knowledge, both fiscal and scientific, which the Government has at its command, there has been constituted a consultative body called the Sanitary Board, the constitution and functions of which are defined in the following rules which were issued in November, 1906:—

RULES REGULATING THE CONSTITUTION AND FUNCTIONS OF THE SANITARY BOARD.

1. The Sanitary Board shall consist of the following members:—

The Financial Commissioner.

The Sanitary Commissioner.

The Second Chief Engineer.

The Sanitary Engineer.

Commissioners, Deputy Commissioners, and Civil Surgeons will be *ex-officio* members of the Board when it meets in their respective jurisdictions. The Financial Commissioner will be President of the Board, and the Sanitary Engineer will be *ex-officio* Secretary.

2. The Board shall meet at such times and places as may be found convenient, provided that a meeting for the consideration of any project referred to the Board shall be held with as little delay as possible. The President may declare any project to be urgent and may arrange for a meeting of the Board to take place at an early date. In such a case the members of the

Board shall, if necessary, abandon their tours, or revise the arrangements which they may have made for the disposal of ordinary duties in order to be present at the meeting. In other cases, longer notice shall be given in order to suit the convenience of the members.

Commissioners of Divisions and Presidents of Municipal Committees may move the President of the Board to declare any project to be urgent.

3. The functions and duties of the Board are as follows:—

- (a) to advise Municipal and Town Committees and all Departments of Government in matters relating to public health, such as the selection and laying out of new sites for stations, bazaars, railway towns, etc., and the preparation of plans and estimates for sanitary works;
- (b) to consider reports by sanitary and other officers on municipalities and other towns and villages, and to record such remarks and suggestions as they see fit for the guidance of the local bodies concerned;
- (c) to examine the progress made by local bodies or departmental officers in giving effect to the advice of the Board, and to report to Government cases in which its advice is persistently disregarded.

4. The functions of the Sanitary Board shall be purely consultative. It shall advise on subjects which fall within the scope of its functions, but it shall not sanction estimates, and it shall not issue orders otherwise than as provided in Rules 5 and 6. The Sanitary Engineer shall be subject to its orders only in so far as he is a member and secretary. As an executive officer he shall not be subject to the authority of the Board.

5. The Sanitary Board may, through the Secretary, call for such information from local bodies and departmental officers as may be necessary to elucidate matters coming before it.

6. The Sanitary Board may call for reports from local bodies as to the action taken by them to give effect to its advice. Cases in which these bodies fail to submit reports, or fail without good cause to give effect to the advice of the Board, shall be reported by the Board to the Local Government.

7. The Secretary shall, in the first week of each month, send to each member of the Board a memorandum showing—

- (a) the projects ready for consideration by the Board; and
- (b) the projects under preparation by him, but not yet ready for discussion by the Board.

If there are no projects falling within class (a) or (b), a note to that effect shall be sent by the Secretary to each member of the Board.

8. Minutes of the proceedings of every meeting of the Board shall be submitted by the Secretary without delay for the information of the Local Government.

The following table shows the expenditure on Civil Sanitary Works during the last four years for which statistics are available:

EXPENDITURE ON CIVIL SANITARY WORKS, 1902-05.
(IN RUPEES.)

		1902.	1903.	1904.	1905.
Water-supply.	Lower Burma,	1,724,165	3,157,026	2,467,268	946,548
	Upper Burma,	83,720	58,237	136,800	286,413
	Total . .	1,807,885	3,215,263	2,604,068	1,232,961
Drainage.	Lower Burma,	118,886	146,540	63,809	457,632
	Upper Burma,	94,262	65,893	54,155	92,572
	Total . .	213,148	212,433	117,964	550,204
Conservancy.	Lower Burma,	570,702	1,129,993	1,099,901	802,925
	Upper Burma,	147,170	134,404	190,182	238,872
	Total . .	717,872	1,264,397	1,290,083	1,041,797
Other sanitary work.	Lower Burma,	2,007,913	1,033,125	954,876	893,437
	Upper Burma,	35,534	60,637	84,210	142,108
	Total . .	2,043,447	1,093,762	1,039,086	1,035,545
Total expenditure on sanitation.	Lower Burma,	4,421,666	5,466,684	4,585,854	3,100,582
	Upper Burma,	360,686	319,171	465,347	759,965
	Total . .	4,782,352	5,785,855	5,051,201	3,860,547

CHAPTER XIX.

HARBOUR ADMINISTRATION

REFERENCES.

- A Note on the Administration of the Rangoon Port Trust. By the Chairman [George Cunningham Buchanan, M. Inst., C.E.]. Rangoon, British Burma Press, 1901. Folio, pp. 9 + 12 + 8 + 5 + 7 + 5.
- Note on the Accommodation at the Port of Rangoon, with Proposals for Improvements and Extensions. By Mr. George C. Buchanan, M. Inst., C.E., Chairman and Chief Engineer, Port Commissioners. Rangoon, British Burma Press, 1902. Folio, pp. 11 + vii.
- Note on Plague Preventive Measures as observed in the Port of Rangoon, with Remarks on the Management and Cost of the Port Health Department. By the Chairman [George Cunningham Buchanan, M. Inst., C.E.], Port Commissioners. Rangoon, British Burma Press, 1903. Folio, pp. 3 + 54.
- Papers relative to the Improvement of the Financial Condition of the Port of Rangoon. Rangoon, British Burma Press, 1904. Folio, p. 59.
- Note on Mooring Accommodation in the Rangoon River for Sea-going Steamers. By George C. Buchanan, M. Inst., C.E., Chairman, Port Commissioners. Rangoon, British Burma Press, 1904. Folio, pp. 5 + xxiv. *Plan*.
- Note on Foreshore Accommodation at the Port of Rangoon, with Proposals for Further Acquisition. By George C. Buchanan, M. Inst., C.E., Chairman, Port Commissioners. [Dated Rangoon, 8th February, 1905, no publisher given.] Folio, pp. 4 + viii.
- Papers in Connection with Proposed River Training Works. Rangoon, British Burma Press, 1906. Folio, pp. 7 + 4 + 18 + 7 + 6 + 3 + 11 + 1 + 5 + 1 + 4 + 1. *Plans*.
- Administration Report of the Commissioners for the Port of Rangoon. Rangoon, British Burma Press. Annual.
- The Bassein Port Manual. A Collection of Rules and Orders specially concerning the Port of Bassein. Rangoon, Govt. Press, 1897, p. 35.
- The Moulmein Port Manual. A Collection of Rules and Orders specially concerning the Port of Moulmein. Rangoon, Govt. Press, 1898, pp. iii + 59.
- The Akyab Port Manual. A Collection of Rules and Orders specially concerning the Port of Akyab. Rangoon, Govt. Press, 1897, pp. 60 + ii.

THE PRINCIPAL PORTS OF BURMA.

Practically, the whole of the sea-borne trade of Burma enters and clears into and from the chief port of Rangoon and the six minor ports of Moulmein, Akyab, Bassein, Mergui, Tavoy, and Kyaukpyu. The relative importance of the ports of Burma appears in the following table, which shows the value of merchandise and treasure, exclusive of government stores and treas-

ure, which entered and cleared into and from the various ports in the foreign trade in the official year 1904-05:—

VALUE OF TOTAL IMPORTS AND EXPORTS, EXCLUSIVE OF GOVERNMENT STORES AND TREASURE, INTO AND FROM THE PORTS OF BURMA DURING THE OFFICIAL YEAR 1904-1905.

(In Rupees.)

	Imports.	Exports.
<i>Chief Port:</i>		
Rangoon	89,445,014	128,567,111
<i>Subordinate Ports:</i>		
Akyab	156,303	6,950,287
Bassein	1,433	11,908,927
Mergui	290,578	429,191
Moulmein	1,356,105	14,468,798
Tavoy	108,480	511,520
Other Ports	37,705	45,575
Total of Subordinate Ports	1,950,004	34,314,098
Grand Total for the Province	91,395,618	162,881,209

The subordinate parts of Burma—that is to say, Moulmein, Akyab, Bassein, Tavoy, Mergui, Kyaukpadaung, and Sandoway—fall into two classes, the first three being administered by port officers appointed by the

Administration of Minor Ports. Government, the last three being administered by the Deputy Commissioner of the district in which the port is situated. Separate Port Funds are maintained for each of the subordinate ports. The receipts of these funds during the official year 1905-06 amounted to Rs. 370,000.

RANGOON PORT ADMINISTRATION.

About 85 per cent. of the total foreign trade of Burma enters into and clears from the port of Rangoon. The value of the foreign trade of Rangoon in the official year 1905-06 was, in round figures, 212 million rupees, equal to about 68 million dollars United States currency.

The administration of the port of Rangoon has recently been reorganized under the terms of the Rangoon Port Act, 1905 (Burma, Act IV. of 1905). The administration of the Port was previously regulated by the Rangoon Port Commissioners Act, 1879, which came into force on the 1st of January, 1880. The earlier measure was in its nature somewhat experimental.

and under it the widest powers of control were vested in the Local Government. The constantly recurring necessity of reference hampered and delayed the action of the Commissioners in the development of a port the importance of which had outgrown its equipment. Amongst the improvements which were suggested by the growing needs of the harbour were (1) the increase of wharf and godown accommodation, (2) the provision of hydraulic machinery on the wharfs and in the warehouses, (3) more efficient lighting, (4) the training of the river, and (5) the provision of a dry dock.

The Rangoon Port Act, 1905, while vesting powers of control in the Local Government, gives the Commissioners less restricted powers for the execution of these works. Under the Act of 1879 the acts and proceedings of the Commissioners were subject to the approval of the Local Government. For the minute supervision exercised by the Government under the earlier Act the Rangoon Port Act, 1905, substitutes a system of annual estimates, the sanction of which by the Local Government will include sanction of the works included therein. The works being sanctioned, the Commissioners will have a comparatively free hand in carrying them out. Power is conferred on the Chairman of the Commissioners to carry out new works, up to the cost of one thousand rupees each, if they are provided for in the budget, and to execute repairs provided for in the budget, subject to such rules as the Commissioners may prescribe in regard to the preparation and sanction of detailed estimates therefor. The Commissioners may, under the new Act, sanction the estimate for any work provided for in a sanctioned budget if the estimated cost does not exceed Rs. 50,000; but, if the cost of a work exceeds Rs. 50,000, the plans have to be submitted to and approved by the Local Government, and, if the cost of a work exceeds Rs. 200,000, the plan and estimate have to be approved by the Governor-General of India in Council.

The Act makes provision for the raising of ordinary revenue by the Commissioners, and invests the Commissioners with certain borrowing powers. The following abstract of the Rangoon Port Act, 1905, covers the more important points in regard to the constitution and powers of the Commissioners for the Port of Rangoon:—

ABSTRACT OF THE RANGOON PORT ACT, 1905.

[Chapter I., Sections 1-5. Short title and commencement. Repeal. Commissioners to be successors of the Commissioners appointed under the Act of 1879. Definitions. Power to define and alter the limits of the Port.]

CHAPTER II.

CONSTITUTION OF THE PORT COMMISSIONERS.

6. The duty of carrying out the provisions of this Act shall, subject to such conditions and limitations as are hereinafter contained, be vested in a body of Commissioners, to be called "The Commissioners for the Port of Rangoon."

Such body shall be a body corporate, and have perpetual succession and a common seal, and may sue and be sued in its corporate name, and, in addition to the powers expressly conferred by this Act, shall have power, subject to the provisions of this Act, to do all other things necessary for the purposes of its constitution.

7. (1) There shall be thirteen Commissioners, of whom four shall be elected by the Rangoon Chamber of Commerce, one shall be elected by the Rangoon Trades Association, and the others shall be such persons as the Local Government may appoint either by name or by virtue of an office, to be Commissioners:

Provided that not more than five Commissioners shall be persons holding salaried offices under Government.

(2) The elections under sub-section (1) by the Rangoon Chamber of Commerce and by the Rangoon Trades Association, respectively, shall be made in such manner as may be determined by those bodies subject to the approval of the Local Government.

8. (1) The Local Government may appoint a Commissioner to be Chairman and another Commissioner to be Vice-Chairman, and may cancel any such appointment.

(2) The Local Government may grant leave of absence to the Chairman, and appoint a person to act for him during his absence on leave;

and any person so appointed shall, while so acting, be deemed for the purposes of this Act to be the Chairman.

(3) Such remuneration as the Local Government may determine shall be paid as salary, leave-allowances and otherwise to the Chairman and to the person appointed under sub-section (2) to act for the Chairman during his absence on leave.

9. Each Commissioner, other than the Chairman, shall be entitled to receive such fee as the Local Government may direct for attendance at each meeting of the Commissioners at which a quorum shall be present and business shall be transacted.

10. (1) If a Commissioner be appointed by virtue of his office, the person for the time being holding the office shall be a Commissioner until the Local Government shall otherwise direct.

(2) The Chairman shall continue to hold office until the Local Government cancels the appointment or appoints a successor.

(3) Commissioners appointed by name, other than the Chairman, shall hold office for two years, and may thereafter be re-elected or re-appointed; but the Local Government may at any time accept the resignation of any such Commissioner.

11. Every person who, at any time after his election or appointment as a Commissioner, shall be absent for three consecutive months from the meetings of the Commissioners without having the permission in that behalf of the Commissioners, or who, not being the Chairman, shall, with such permission, be absent from the meetings for a period exceeding one year, and every person—

- (a) who at any time after his election or appointment as a Commissioner shall accept or agree to accept any office or place of profit under this Act, except the office of Chairman; or
- (b) who shall, save with the sanction of the Local Government, participate or agree to participate in the profits of any work done by order of the Commissioners, or be concerned or participate in the profits of any contract entered into with the Commissioners; or
- (c) who, in contravention of the provisions of the proviso to clause (e) of section 16, shall take part in the discussion of or vote on any matter in which he is pecuniarily interested—

shall thenceforth cease to be a Commissioner and his office shall thereon become vacant:

Provided that no Commissioner shall vacate his office by reason only of his being a shareholder in or member or employé of any Company registered under the provisions of any Act for the registration of joint-stock companies, passed by any Indian Legislature or by the Parliament of the United Kingdom, or incorporated by Act of Parliament, Royal Charter or otherwise, with which the Commissioners may enter into any contract, or by reason of his being interested in any loan of money to the Commissioners:

Provided also that no Commissioner shall vacate his office by reason of his being interested in any purchase or lease of land or premises, the sale or lease of which the Commissioners may determine on at a meeting under the provisions of this Act; or of his being interested in any agreement under which facilities may be granted for the landing and shipment of goods in return for stipulated income guaranteed to the Commissioners in consideration of their undertaking to construct or provide such facilities.

12. Every election and appointment to office made and resignation accepted under the provisions of this Chapter shall be notified in the *Gazette*, and shall be valid and take effect from the date of such notification.

CHAPTER III.

CONDUCT OF BUSINESS BY THE COMMISSIONERS.

13. (1) The Commissioners shall meet for the transaction of business at least once in every month.

(2) At least three days' notice shall be given of every meeting of the Commissioners, and the notice shall state the nature of the business to be transacted.

14. The Chairman, or, in the event of his illness or absence from Rangoon, the Vice-Chairman, may, whenever he thinks fit, and shall upon a requisition in writing signed by not less than three Commissioners, convene a meeting of the Commissioners for the transaction of any special business.

Meetings so convened are special meetings; all other meetings are ordinary meetings.

15. The Chairman and Vice-Chairman shall, unless prevented by sickness or other reasonable cause, attend all meetings of the Commissioners.

16. At all meetings of the Commissioners the business shall be conducted in accordance with the following provisions, namely:—

- (a) the Chairman, or, in his absence, the Vice-Chairman, shall be President; if both be absent, the Commissioners may elect one of their number to be President;
- (b) the President may, with the consent of the meeting, adjourn the meeting from time to time;
- (c) at special meetings no business shall be transacted other than the special business for the consideration of which the meeting was specially called; at ordinary meetings any business may be transacted of which due notice has been given;
- (d) the quorum necessary for the transaction of business shall be such number, not less than five, as the Commissioners may, from time to time by bye-law, prescribe; but no Commissioner who is prohibited as hereinafter provided from voting or taking part in any proceedings shall be counted in the quorum so far as regards such proceedings;
- (e) all questions which may come before the Commissioners at any meeting shall be decided by a majority of votes. Each Commissioner shall have one vote; and, in case of equality of votes, the President shall have a second or casting vote:
 Provided that no Commissioner shall at any meeting take part in the discussion of or vote on any matter in which he has, directly or indirectly by himself or his partner, any share or interest such as is described in the provisos to section 11 or in which he is interested either professionally on behalf of a client or as agent for any person;
- (f) minutes of the proceedings of the Commissioners shall be drawn up after each meeting and shall be signed by the President and at least one other Commissioner, who was present at such meeting; a copy of all such minutes shall, as soon as conveniently may be, be transmitted to the Secretary to the Local Government;
- (g) another copy of such minutes, except such portions thereof as the Chairman may in any particular case direct, shall be open to the inspection of the public.

17. No proceedings of the Commissioners at any special or ordinary meeting shall be deemed invalid by reason only of any vacancy in the number of the Commissioners or defect in the election or appointment of any of the Commissioners or defect of form.

18. The Commissioners may, from time to time, make bye-laws consistent with this Act for regulating the time and place of their meetings, the conduct of their business, the division of the duties among themselves, the guidance of persons employed by them, and for other similar matters.

19. The Chairman may carry out—

- (a) new works provided for in an estimate sanctioned under the provisions of Chapter VIII at the time in force, the estimated cost of which shall not in any one case exceed one thousand rupees; and
- (b) repairs, provided for in the said estimate, subject to such rules as the Commissioners may prescribe in regard to the preparation and sanction of detailed estimates therefor.

20. Subject to the provisions of section 21, the Commissioners in meeting may sanction the execution of any works authorised by this Act and provided for in an estimate sanctioned under the provisions of Chapter VIII at the time in force.

21. (1) No new work shall be commenced and no contract in respect thereof shall be entered into, if the estimated cost of such work exceeds—

- (i) two thousand rupees, until the plan and estimate therefor shall have been determined on and approved by the Commissioners in meeting; or
- (ii) fifty thousand rupees, until the plan and estimate therefor shall have been submitted to, and approved by, the Local Government.

(2) In case the estimated cost of such new work shall exceed two lakhs of rupees, the Local Government shall not sanction the same, until such plan and estimate shall have been approved by the Governor-General in Council.

22. The Commissioners may enter into contracts authorised by this Act with any person for the execution or supply of any works, labour, materials, machinery, stores or for other matters necessary for carrying into effect the trusts and purposes of this Act.

Any such contract of which the value does not exceed five thousand rupees may be made by the Chairman in the case of any work or matter which he is authorised to carry out by this Act or the bye-laws thereunder or which has been sanctioned by the Commissioners, but other contracts shall not be entered into except in accordance with a resolution passed by the Commissioners in meeting.

23. (1) Any such contract whereof the value does not exceed five thousand rupees, made by the Chairman for and on behalf of the Commissioners, may be made in such manner and form as, according to the law for the time being administered in Rangoon, would bind him if such contract were on his own behalf.

(2) Every contract and agreement by or on behalf of the Commissioners, the value of which shall exceed the sum of five thousand rupees—

- (a) shall, if made in Rangoon Town, be in writing signed by the Chairman and by two other Commissioners, and shall be sealed with the common seal of the Commissioners; or
- (b) may, if made outside Rangoon Town, be made, in such manner and form as according to the law for the time being would bind him if made on his own behalf, by an agent duly appointed,

either generally or specially, in that behalf by the Commissioners under a power of attorney signed by the Chairman and by two other Commissioners and sealed with the common seal of the Commissioners.

(3) No contract or agreement in value exceeding the said sum, which is not executed in accordance with the provisions of this section, shall be binding upon the Commissioners.

24. The Commissioners in meeting may abandon, compound or compromise any claim or demand on such terms as to them may seem fit.

[Chapter IV., Sections 25-28. Provides for the appointment of officers and servants of the Commissioners, invests the Commissioners with power subject to the approval of the Local Government, to make bye-laws as to leave, pensions, provident and annuity funds, and declares that the power of appointment, promotion, dismissal, and so on, may be exercised by the Chairman in the case of officers and servants whose monthly salary does not exceed two hundred rupees, and in every other case by the Commissioners in meeting.]

[Chapter V., Sections 29-33. Invests the Commissioners with power to acquire and hold movable or immovable property and to lease, mortgage, sell, or exchange the same, provided that no sale of immovable property and no lease or alienation thereof for a term exceeding ten years shall be valid without the previous sanction of the Local Government.]

CHAPTER VI.

BORROWING POWERS.

34. The Commissioners may, with the previous sanction of the Local Government and of the Governor-General in Council and after due notification in the *Gazette*, raise money required for carrying out the purposes of this Act.

35. (1) All loans raised under this Act shall be raised on the security of—

- (a) the property now vested, or which may hereafter become vested, in the Commissioners; and
- (b) the tolls, dues, rates, rents and charges leviable under this Act, less any sums set apart by the Commissioners, as a sinking fund for the purpose of paying off loans.

(2) Loans may be floated in the open market, or obtained from the Secretary of State for India in Council, but the terms of every loan shall be subject to the approval of the Governor-General in Council.

36. (1) All debentures issued under this Act shall be in the form prescribed in the Third Schedule, or in such other form as may, from time to time, be approved by the Commissioners in meeting and the Local Government; and shall be transferable by indorsement.

(2) The right to sue in respect of moneys secured by such debentures shall be exercisable by the holders thereof for the time being, without any preference by reason of some of such debentures being prior in date to others.

(3) The Secretary of State for India in Council shall have, in respect of all loans made by him to the Commissioners, the same remedies as debenture holders; but he shall not be deemed to possess any prior or greater rights in respect of such loans than debenture holders.

37. All loans repayable by the Commissioners, whether contracted prior to or after the commencement of this Act, shall be a first charge on the income of the Commissioners and on the property now vested, or which hereafter may become vested, in the Commissioners.

38. All loans contracted by the Commissioners shall be raised in India, and in Indian currency, unless the Local Government, with the previous sanction of the Governor-General in Council, shall by notification otherwise direct.

39. (1) In respect of every loan raised by the Commissioners after the passing of this Act, for a term exceeding one year, (except a loan taken from the Secretary of State for India in Council), the Commissioners shall provide a sinking fund. Payments shall be made half-yearly to such sinking fund, and such payments shall be of such amount as will be sufficient to liquidate the loan within a period which shall not exceed thirty years or, with the previous sanction of the Governor-General in Council, sixty years.

(2) The Commissioners may apply the whole or any part of the sums accumulated in the sinking fund in or towards the discharge of the moneys for the repayment of which the fund has been established, provided that they pay into the fund in each year, and accumulate until the whole of the moneys borrowed are discharged, a sum equivalent to the interest which would have been produced by the sinking fund, or the part of the sinking fund so applied.

The sums so set apart as a sinking fund shall be invested in securities of the Government of India or in the Commissioners' debentures, or in such other securities as the Local Government may approve in this behalf, and shall be held in trust for the purposes of this Act by two trustees, one being the Commissioners and the other a person appointed by the Local Government.

40. The sinking fund established for the liquidation of any loan shall be subject to annual examination by the Accountant-General, Burma, who shall ascertain whether the cash and the current value of the securities at the credit of the fund are actually equal to the amount which would have been accumulated, had investments been regularly made, and had the rate of interest as originally estimated been obtained thereon.

The Commissioners shall pay forthwith into the sinking fund any amount which the Accountant-General may certify to be deficient, unless the Governor-General in Council specially sanctions a gradual readjustment.

41. The Commissioners may apply any sums, which can be so applied without prejudicing the security of the other debenture holders of the Commissioners, in repaying to the Secretary of State for India in Council any sum which may remain due to him in respect of the principal of any loan, although the time fixed for the repayment of the same may not have arrived:

Provided that no such repayment shall be made of any sum less than ten thousand rupees; and that if such repayment is made, the amount of inter-

est in each succeeding instalment shall be adjusted so as to represent exactly the interest due on the outstanding principal.

42. Nothing contained in this Act shall prevent the Commissioners from raising, with the sanction of the Governor-General in Council, loans under Act III of 1904.

CHAPTER VII.

DISPOSAL OF FUNDS.

43. (1) Except as provided in section 44, all moneys raised by and paid to the Commissioners under this Act shall be kept in the Bank of Bengal in Rangoon:

Provided that any surplus moneys not immediately required for the purposes of this Act, but which may be so required after such a short period as would, in the opinion of the Commissioners, prevent an advantageous investment thereof under the provisions of section 44 may, from time to time, be deposited by the Commissioners on interest in any bank or banks in Rangoon selected for that purpose by the Commissioners.

(2) No portion of any funds kept or deposited in any bank under subsection (1) shall be withdrawn from such bank except under the signature of the Chairman or Vice-Chairman.

44. The Commissioners may invest—

- (i) any balance remaining on the 31st March of each year to the credit of any account kept by them, after meeting all the charges properly debitable to such account; and
- (ii) any moneys set aside for any special purpose or for the maintenance of any approved fund considered desirable by them,

in securities, of the Government of India or in such other securities as the Local Government may approve in this behalf;

and may, from time to time, sell the said securities, and invest the proceeds in other such securities, or credit the same to the account to which the moneys invested belonged for expenditure on any of the purposes to which moneys credited to such account may lawfully be applied:

Provided that the amount so invested by the Commissioners in respect of any account shall not exceed such amount, annually or in the aggregate, as may be prescribed by the Local Government.

45. The moneys belonging to the Commissioners shall be applied by them in payment of the following charges and, in the case of a deficiency of assets, such charges shall rank as against the funds of the Commissioners and be paid in the following order, namely:—

- (1) the interest and instalments of capital due in respect of any loan that may have been raised by the Commissioners or for the repayment of which the Commissioners may be liable;
- (2) the salaries, fees, allowances, pensions, gratuities, compassionate allowances or other moneys due to the Chairman and to the Commissioners, and to the officers and servants appointed or maintained under this Act or lent to the Commissioners, and the contributions, if any, payable to the Local Government on ac-

count of the pension and leave allowance of any officer lent to the Commissioners by the Local Government, and the contributions, if any, duly authorised to be made to any provident or annuity fund by bye-laws made under the provisions of section 26, clause (g);

- (3) any charges for which the Commissioners may be liable under section 61 or section 62;
- (4) such sum as the Local Government may, from time to time, require under section 47 for the establishment and maintenance of police for the protection of the Port and the approaches thereto;
- (5) if the Commissioners are appointed by a notification of the Local Government to exercise the powers and perform the duties specified in section 36, sub-section (1) of the Indian Ports Act, 1889, any other payment or expenditure mentioned in sub-section (5) of that section which the Local Government may direct the Commissioners to make or incur;
- (6) sums payable to the Municipal Committee of Rangoon under section 46;
- (7) the cost of repairs and maintenance of the property vested in the Commissioners, and all charges upon the same and all working expenses;
- (8) the cost of the construction and carrying out of any of the works specified in section 64; and
- (9) any other charge, which may be specially sanctioned by the Local Government or for which the Commissioners may be legally liable.

46. The Commissioners shall pay to the Municipal Committee of Rangoon the annual sum of ten thousand rupees as and by way of compensation for loss of income from sources of revenue now vested in the Commissioners which were, prior to the commencement of the Rangoon Port Commissioners Act, 1879, vested in the Municipal Committee of Rangoon.

47. The Commissioners shall provide such sums as the Local Government may from time to time require for the establishment and maintenance of police, to be called "Port Police," for the protection of the Port and the approaches to the Port.

CHAPTER VIII.

ANNUAL ESTIMATES AND ACCOUNTS.

48. (1) The Chairman shall, at a special meeting to be held in the month of February in each year, lay before the Commissioners an estimate of the income and of the expenditure of the Commissioners for the year commencing on the first day of April then next ensuing, in such detail and form as the Commissioners may, from time to time, direct, subject to the approval of the Local Government.

To such estimate there shall be added—

firstly, an appendix containing particulars of all new works covered by the estimate and of the estimated cost of the same; and

secondly, the schedule of the officers and servants, sanctioned under the provisions of section 25.

(2) Such estimate shall be completed and printed, and a copy thereof sent by post or otherwise to each Commissioner at least ten clear days prior to the meeting before which the estimate is to be laid.

(3) The Commissioners shall consider the estimate so submitted to them, and shall pass the same unaltered or subject to such alterations as they may think fit.

49. (1) A copy of the estimate as passed by the Commissioners shall be open to the inspection of the public at the office of the Commissioners during office-hours on payment of one rupee for each inspection, and another copy thereof shall be submitted for approval to the Local Government which may, if it thinks fit, approve or disallow such estimate or any portion thereof, and return the same for amendment at any time within two months of the receipt thereof.

(2) The Commissioners shall, if the estimate is so returned by the Local Government, forthwith proceed to amend the same and shall re-submit the estimate so amended for approval to the Local Government.

(3) A copy of such estimate as finally approved by the Local Government shall also be open to the inspection of the public at the office of the Commissioners during office-hours on payment of one rupee for each inspection.

50. (1) The Commissioners may at any time during the year, for which any such estimate has been sanctioned, cause a supplementary estimate to be prepared and submitted to them.

(2) Every such supplementary estimate passed by the Commissioners shall be submitted for approval to the Local Government in the same manner, and the provisions of section 49 shall apply to it, as if it were an original estimate.

51. Subject to any directions which the Local Government may give in this behalf, any sum of money, or part thereof, of which the expenditure has been authorised in an estimate sanctioned under the foregoing provisions and which has not been so spent, may, at any time, be re-appropriated by the Commissioners to meet any excess in any other expenditure authorised in the said estimate:

Provided that the total amount of expenditure sanctioned by such estimate as passed by the Commissioners and approved by the Local Government shall not be exceeded without the sanction of the Local Government.

52. Save in cases of pressing emergency, no sum shall be expended by or on behalf of the Commissioners, unless such expenditure is provided for in an estimate sanctioned under this Chapter and at the time in force, or by a re-appropriation amending such estimate passed by a resolution of the Commissioners under section 51.

53. If any sum exceeding a total in the year of five thousand rupees shall be so expended in cases of pressing emergency, the circumstances shall be reported by the Chairman to the Local Government together with an explanation of the way in which it is proposed by the Commissioners to cover such expenditure.

54. No expenditure shall be charged by the Commissioners to capital except with the express sanction of the Local Government.

55. The accounts of the Commissioners shall be examined and audited in such manner as the Local Government may direct.

56. (1) The Commissioners shall annually, or oftener if directed by the Local Government so to do, submit statements of their receipts and disbursements in such form and at such time as the Local Government may direct.

(2) A copy of all such statements shall be open to the inspection of the public at the office of the Commissioners during office-hours on payment of one rupee for each inspection.

CHAPTER IX.

CONTROL OF GOVERNMENT.

57. All acts and proceedings of the Commissioners shall be subject to the approval of the Local Government.

58. The Commissioners shall annually, or oftener if directed by the Local Government so to do, submit, in such form and at such time as the Local Government may direct, reports of all works executed and proceedings taken by them under this Act.

59. It shall be incumbent upon the Commissioners to make ample provision year by year, either by retrenchment of expenditure or by increase of rates, for the due fulfilment of all their liabilities and for the efficient administration of this Act;

and, in the event of any deficiency being at any time anticipated in the income of the Commissioners, they shall forthwith take such measures as may seem most expedient for preventing such deficiency.

60. (1) If at any time it appears to the Local Government that sufficient provision is not being made by the Commissioners to meet their liabilities,

the Local Government may require the Commissioners, by an order in writing signed by a Secretary to Government, to make such provision in either or both of the following ways, namely:—

(a) to increase, subject to the sanction of the Local Government, to such extent and for such period as may appear necessary, the rates or any of the rates for the time being in force under section 81, or

(b) to exercise, subject to the like sanction, all or any of the powers conferred by section 82 with reference to all or any goods referred to in that section.

(2) If within fifteen days after receipt of an order under sub-section (1), clause (a), the Commissioners do not comply with the same, the Local Government may, by notification, increase the said rates or any of them, and such notification shall have the same force as if a new scale of rates to the same effect had been duly framed, sanctioned and published under section 81.

(3) If the Commissioners do not forthwith comply with an order under sub-section (1), clause (b), the Local Government may, by notification, impose or increase any river-duty on all or any goods referred to in section 82,

and such notification shall have the same force as if a river-due to the same extent had been duly imposed, sanctioned and published under section 82.

61. The Local Government may at any time order a survey and examination of any works of the Commissioners under this Act, or the site thereof, and the cost of such survey or examination shall be borne and paid by the Commissioners.

62. If the Commissioners allow any work acquired or constructed by them under this Act to fall into disrepair, or do not complete any work commenced by them or duly estimated for and sanctioned,

and do not, after notice given by the Local Government in writing, proceed effectually to repair or complete such work,

the Local Government may cause such work to be restored, completed or constructed, and the cost thereof shall be borne and paid by the Commissioners.

63. (1) If at any time the Governor-General in Council is satisfied that the purposes intended to be accomplished under this Act have not been and are not likely to be properly accomplished by the Commissioners, the Governor-General in Council may, by notification in the *Gazette of India*, to be republished in the *Gazette*, give notice that, unless within six months the Commissioners take measures to the satisfaction of the Governor-General in Council for properly accomplishing such purposes, the powers by this Act conferred on the Commissioners will, at the end of such period, be withdrawn and revoked.

(2) On the expiration of the period aforesaid, the Governor-General in Council may, if no such measures to his satisfaction have been taken by the Commissioners, declare such powers to be withdrawn or revoked, and may direct the Local Government to assume such powers;

and thereupon such powers shall be withdrawn and revoked accordingly, and all the powers, rights and authorities and all the property vested in or held by the Commissioners for the purposes of this Act shall thereupon vest in the Local Government.

[Chapter X., Sections 64-92. Lays down the general powers of the Commissioners in regard to the construction of port works, the making of bye-laws, the raising of revenue by means of tolls and charges, and grants the Commissioners a lien on all goods in respects of which tolls, dues, rates, and charges are due.]

[Chapter XI., Sections 93-98. Prescribes penalties for infringement of the provisions of the Act and for the breach of port bye-laws made under the provisions of the Act.]

CHAPTER XII.

MISCELLANEOUS.

99. No Commissioner shall be personally liable for any contract made or expense incurred by or on behalf of the Commissioners, but the funds from time to time in the hands of the Commissioners shall be liable for, and chargeable with, all contracts made in manner hereinbefore provided.

100. Every Commissioner shall be liable for any misapplication of money intrusted to the Commissioners, to which he has been a party, or which happens through, or is facilitated by, the neglect of his duty.

101. (1) No suit shall be brought against the Commissioners, or against any Commissioner, or against any of the officers or servants of the Commissioners or any person acting under their direction, for anything purporting to be done under this Act, until the expiration of one month next after notice in writing has been delivered or left at the office of the Commissioners or at the place of abode of such person, stating the cause of suit and the name and place of abode of the intending plaintiff.

Unless such notice be proved, the Court shall dismiss the suit.

(2) Every such suit shall be commenced within six months next after the accrual of the right to sue and not afterwards.

(3) If any person to whom any such notice of suit is given, tenders sufficient amends before suit is brought, such plaintiff shall not recover.

102. The responsibility of the Commissioners for the loss, destruction or deterioration of animals or goods, during such time as the same remain in the possession or under the control of the Commissioners, shall, subject to the other provisions of this Act, be that of a bailee under sections 151, 152, and 161 of the Indian Contract Act, 1872.

103. Except as provided in the last preceding section, the Commissioners shall not be answerable—

- (i) for any misfeasance, malfeasance or nonfeasance of any officer appointed under this Act, or of any Deputy Conservator or of any pilot, or of any deputy or assistant of any of the officers above-mentioned, or of any person acting under the authority or direction of any such officer or assistant; or
- (ii) for any damage sustained by any vessel in consequence of any defect in any of the moorings, hawsers or other things within the limits of the Port which may be used by such vessel:

Provided that nothing in this section shall protect the Commissioners from a suit in respect of any negligence or default on their part or of any act done by or under their express order or sanction.

104. All acts done and proceedings taken by the Commissioners appointed under the Rangoon Port Commissioners Act, 1879, and all orders, rules, regulations and bye-laws relating to the Port and to docks, wharves, quays, stages, jetties, piers, landing-places, tolls, charges, rates and dues within the Port made and issued before the commencement of this Act shall, whenever such acts, proceedings, orders, rules, regulations or bye-laws would have been lawful, if this Act had been in force, be deemed to have been respectively done, taken, made and issued under the provisions of this Act.

105. The Commissioners shall have an office, where they shall ordinarily meet for the transaction of business.

106. Every Commissioner and the officers and servants of the Commissioners, other than artisans, porters, labourers, and sirdars of porters and labourers, shall be deemed to be public servants within the meaning of section 21 of the Indian Penal Code.

THE FINANCES OF THE PORT OF RANGOON.

The following brief account of the finances of the Port of Rangoon is compiled chiefly from an important publication of the Rangoon Port Trust entitled "Papers relative to the Improvement of the Financial Condition of the Port of Rangoon." This document was issued in 1904. The figures for the years 1903 and 1906 are taken from the annual *Administration Report of the Commissioners for the Port of Rangoon*.

The debt of the Port Commissioners at the end of the official year 1905-06 amounted to Rs. 5,824,041; and it is anticipated

that by the end of the year 1908-09 the debt will have increased to about 44 millions of rupees. Practically the whole

of this debt represents money raised since 1903 for the purpose of carrying out new works in connection with the improvement of the port.

The revenue of the Port Commissioners is derived from a number of sources, of which the most important are landing

Sources of Revenue. fees, wharfage fees, shipping fees, port dues, and rents. In the official year 1905-06 the total ordinary receipts amounted to Rs. 1,913,146. The revenue under the principal heads during the past three years is given in the following table:—

ORDINARY REVENUE OF THE RANGOON PORT TRUST DURING THE OFFICIAL YEARS 1903-04 TO 1905-06.

(In Rupees.)

Source of Revenue.	1903-04.	1904-05.	1905-06.
Wharfage fees	84,126	94,839	128,092
Landing fees	688,936	800,856	735,861
Shipping fees	69,916	238,467	114,584
Rents of warehouses, godowns, etc.	144,541	167,854	206,811
Port dues	241,363	267,846	272,699
Cargo-boat licenses	18,947	14,520	37,377
Passenger-boat licenses	22,605	15,003	31,344
Harbour-master's fees	53,408	51,024	56,992
Mooring fees	52,688	53,503	61,932
Interest on investments	4,375	4,375	6,119
Interest on daily balance	30,812	56,269	60,147
From all other sources	288,773	407,225	255,908
Total ordinary revenue	1,690,590	2,200,781	1,913,146

The expenditure of the Port Commissioners represents a great number of charges incident to the work of the port, the maintenance and repair of the port properties,

Objects of Expenditure. the cost of river police, municipal taxes, salaries, stores, interest on loans, payments to sinking funds, etc., and the cost of new works chargeable to surplus revenue. The expenditure under the principal heads during the past three years is given in the following table:—

ORDINARY EXPENDITURE OF THE RANGOON PORT TRUST DURING
THE OFFICIAL YEARS 1903-04 TO 1905-06.

(IN RUPEES.)

Objects of Expenditure.	1903-04.	1904-05.	1905-06.
General charges (chiefly salaries, law expenses, plague hospital)	287,029	343,388	685,997*
Strand Bank Properties† (chiefly salaries, taxes, cost of police, maintenance, and repairs)	403,757	492,457	599,565
Port Department (chiefly salaries and the maintenance and repair of the Department's vessels)	329,794	324,802	358,530
Interest and Sinking Funds	62,202	124,575	252,783
New works to be met from surplus revenue	323,580	290,536	393,327
Total ordinary expenditure	1,496,363	1,584,759	2,290,202

* The large increase is due to the creation of three funds, one to provide for insurance, one to cover depreciation and replacement, and one to form a revenue reserve. A further cause of increase (a charge, however, which will not recur) is the payment to the port capital account of Rs. 215,000 which had been improperly paid in previous years into the revenue account.

† These properties are the wharves, warehouses, godowns, piers, landing-stages, and jetties situated on the bank of the Irrawaddy River.

CHAPTER XX.

THE ADMINISTRATION OF THE SHAN STATES

REFERENCES.

- Gazetteer of Upper Burma and the Shan States. Compiled from Official Papers by [Sir] J. George Scott, assisted by J. P. Hardiman. Rangoon Govt. Press, 1900, 1901, 5 vols., quarto, pp. 742, 583, 560, 818, and 457. *Maps, Illustrations, Glossaries.*
- Colquhoun, Archibald R. Amongst the Shans, with upwards of fifty whole-page illustrations, and a Historical Sketch of the Shans, by Holt S. Hallett; preceded by an Introduction on the Cradle of the Shan Race, by Terrien de Lacouperie. London, Field & Tuer, 1885, pp. 392. *Map.*
- Elias, Ney. Introductory Sketch of the History of the Shans in Upper Burma and Western Yunnan. Calcutta Foreign Dept. Press, 1876, pp. 63.
- Hallett, Holt S. A Thousand Miles on an Elephant in the Shan States. Edinburgh, Blackwood, 1890, pp. xxxvi + 484. *Maps, Illustrations.*
- Scott, Sir J. George. The Prospects of the Shan States. *Journal of the Society of Arts*, vol. liii., 1905, pp. 623-639. *Map.*
- Report on the Administration of the Shan States. Rangoon. Govt. Press, Annual.
- Shan States Manual, 1901. Rangoon, Govt. Press, 1901, pp. viii + 84.

For further references consult the Bibliographical Appendix.

THE SHAN COUNTRY.

The country between Assam and China is the point from which a number of great rivers start southwards in parallel courses, at first within a very narrow span of longitude, and afterwards spreading out into a fan which covers the country from the Yellow Sea to the Bay of Bengal. They all run in deep narrow rifts, and the ridges which separate them continue to run southwards almost as far as the rivers themselves and in chains almost as sharply defined as the river channels. These mountain ranges widen out as the river valleys widen, and lose their height as tributary streams break them up into herring-bone spines and spurs, but they still preserve the same north and south direction, though here and there they re-enter and form the series of flat-bottomed valleys, or wide straths, which make up the Shan States. Of all the rivers the Salween most steadily preserves its original character, and flows swiftly through a deep

narrow gorge between high ranges from its source till it reaches the plain land which it has itself piled up over the sea in the course of ages.

It runs nearly through the centre of the British Shan States, and they are situated towards the fringe and nearly in the centre of the fan, which has for its ribs the Brahmaputra, the Irrawaddy, the Salween, the Mekong, and the Yang-tze. The Salween with its mountain banks has always formed a serious barrier, so that the branches of the Tai (Shan) race on either side differ in dialect, in name, and even in written character, but their general features differ no more than the appearance of the country, which is simply a plateau roughened by mountain chains splitting up and running into one another, while still preserving their north and south tendency. The general height of the plateau is between 2,000 and 3,000 feet, but the cross ridges and the drainage cut it up into a series of valleys or plains, some long and narrow, some rounded like a cup, some flattened like a saucer, some extensive enough to suggest the Irrawaddy valley on a miniature scale. It is no doubt this physical character of the country which has affected the national character, and has prevented the Tai (Shans) from living at peace with one another and uniting to resist the encroachment of ambitious neighbours. It also made obvious and easy for the conqueror the old maxim *divide et impera*, the more so since the hills everywhere are inhabited by various tribes all more or less wild.

The Tai are seldom found away from the alluvial basins, and do not look upon themselves as a hill people at all. The larger plains are intersected with irrigation canals, while in the smaller the streams are diverted by dams into channels which water the slopes, or bamboo wheels are used where the river-banks are high and the extent of flat land justifies it. Everywhere the cultivation is more careful and laborious than in Burma, and in many places cold season crops, such as tobacco and ground-nuts, are grown. The most extensive rice-plains are those of Mōng Nai, Lai Hka, Hsen Wi, and Yawngghwe, and there are many other States where, though the area is smaller, there is wet cultivation far beyond the needs of the working capacity of the population.

In some parts, as in the Myelat, parts of Mōng Nawng and Kehsi Mānsām, and in South Hsen Wi State east of Loi Lōng, comparatively dry uplands have been cultivated so regularly and for so many years that hardly a tree is to be seen except in the village enclosures and about the religious buildings. Here, except in rare strips along the banks of the streams, the culti-

vation is all dry, what is called *hai* in Shan and *taungya* in Burmese, and the same *hai* cultivation is practised on the hill slopes.

Everywhere there are large numbers of cattle, and it seems probable that some of the more easterly Cis-Salween States, where there is much grazing country, will devote themselves more and more to cattle-breeding. Buffaloes are chiefly used for agricultural work and bullocks as transport animals.

THE SHAN PEOPLE.

In person the Shans bear a great resemblance to both the Burmese and the Siamese, but as a rule, they are fairer. They are muscular and well-formed, and average at least an inch higher. The eyes are moderately linear; the nose is small rather than flat; the mouth is large, and seems larger from the discolouration of the teeth and gums by constant betel-chewing. The hair is long, straight, and lank, and rarely any other colour than black. They tattoo to mid-calf and also higher up the body than the Burman. Some of the *Sawbwa's* followers were in former days tattooed from the neck to the ankle, and occasionally some had even the face and the backs of the hands tattooed in blue. Ordinarily, however, the tattooing on chest, back, and arms is red, as it is with the Burman, and is in isolated patterns. Shan tattooers are considered specially expert, particularly in the tattooing of charms.

The people are a quiet, mild, good-humoured race, as little addicted to intemperance in drinking or opium-smoking as the Burmese. In religion the Shans are almost all Buddhist.

The Rev. Dr. J. N. Cushing, who is generally recognised as the best authority on the Shans, and who furnished an interesting monograph on their history and ethnography for Mr. H. L. Eales's Report on the Census of Burma, 1892, writes:—

The Shans are a thrifty people. They are good agriculturists, but excel in trading, by which they supply themselves with food and merchandise not obtainable in their own country. The houses of the better class exhibit a cleanliness and comfort not found among Burmans of the same rank. They have much independence of character, but are given to jealousies and personal dislikes which have kept them divided politically and socially. In warfare they are often cruel and vindictive, not only seeking to put to the sword all the men of a hostile region, but often slaughtering the male children who fall into their hands. In times of peace they are cheerful, hospitable, and ready to render help to one another. An innate restlessness gives rise to frequent change of residence in the Shan country itself, so that often a good per-

centage of the population in a principality is not native born to that principality.

The Report on the Administration of the Northern Shan States for the year 1890-91 contains the following interesting description of Shan society, written by Lieutenant H. Daly, Superintendent of the Northern Shan States.

The population may be divided into four classes:—

- | | |
|-------------------------|-----------------------------|
| (1) The official class. | (3) The artisan class. |
| (2) The trading class. | (4) The agricultural class. |

The line between the official class and the others is however very finely drawn, and in many cases near relatives of the officials, or even the officials themselves, are engaged in trade or agriculture. In the trading class again it is only the large caravan owners who devote themselves permanently and exclusively to trade. The petty owners, *pakōndans*, bazaar-sellers, and bullock-drivers vary their trading excursions by spells of agricultural work. The agricultural class consists of two branches: firstly, the well-to-do agriculturists, who are more or less bound to the soil and rarely move except for very special reasons; and, secondly, the migratory class, who wander about from circle to circle, working for a season or two in one place and then drifting on to another. This latter section is, as elsewhere noted, very numerous, and the majority lead a hand-to-mouth existence. Finally, over and above these four classes, there remains a floating mass of vagabonds and idlers, who are the main cause of all and any trouble that arises. This last element is the direct legacy of the years of anarchy and disorder which preceded British rule; and is composed in the main of men who found it easy in those days to live on the plunder obtained by taking part in the inter-State quarrels. In the years immediately following the annexation the number of these freelances was very considerable, as is proved by the ease with which leaders of petty insurrections were able to collect followers; but more recently the great majority have found it necessary to return to regular pursuits. Those who retain their old habits are for the most part men who had acquired some sort of distinction in the civil feuds; many of these have now entered the service of various Chiefs and officials, and take advantage of their position and authority to commit, when opportunity arises, acts of extortion which not unfrequently take the form of dacoity or highway robbery. The remainder support themselves as a rule by gambling, cattle-lifting, and petty dacoity, and by taking part in any disturbances or border feuds that may occur. These men are as a rule well and widely known; and it is a fair illustration of the conditions obtaining in the States that they are allowed to wander unharmed and are perfectly safe from interference, provided only they keep clear of any circle in which they have committed a serious crime. Beyond the imaginary line which marks the borders of such a circle the criminal would be unmolested, and in nine cases out of ten no action would be taken, even if the immediate sufferers were actually aware of his presence on the circle border.

BRITISH OCCUPATION OF THE SHAN STATES.

Prior to the British occupation of the Shan States these principalities were under the suzerainty of the King of Burma. Although the native Shan rulers were allowed a good deal of freedom in managing the internal affairs of their States, the interference of the King of Burma was frequent, and took various forms. He always exercised the right of nominating heirs from among the chiefs' families. Sometimes in case of dispute a principality was split up, and a portion given to each of the claimants. Unruly chiefs were deposed or driven into exile. Some were bought out by palace intrigues, others were imprisoned in the Burmese capital.

For thirty years before the British occupation the Shan States had been in a constant ferment of civil war. This began with the southward pressing of the Kachin or Chingpaw tribes, which overran the State of Hsen Wi, and occupied half its area. Then King Thibaw, by a long course of oppression and plundering, drove Mōng Nai, the great Southern *Sawbwa*, into open revolt. By calling upon other Shan chiefs to aid the Burmese in the punishment of Mōng Nai, King Thibaw plunged the country into a state of internal strife and disorder.

When Thibaw was dethroned by the British in 1886, the Shan States were in a state of universal ruin. Monè, which within living memory had had ten thousand households, was reduced to seventeen huts, and the town of Laihka was even more thoroughly destroyed.

In assuming control of the country, the British met with little opposition; but the task of rehabilitating the States has been a long process.

A general view of the effects of the British occupation and of the character of the control which is exercised by the Government of Burma over the Shan States may be obtained from a perusal of the following extracts from a speech delivered by Sir Frederic Fryer, K.C.S.I., the first Lieutenant-Governor of Burma, at a *darbar* held at Taunggyi, headquarters of the Southern Shan States, on the 7th of May, 1895:—

Five eventful years have passed since my distinguished predecessor, Sir Charles Crosthwaite, whose name will always be held in honour in this province, addressed you in *darbar* at Fort Stedman. Time has wrought changes in those years, and many of those who listened to the Chief Commissioner in that *darbar* have been removed by death. The sudden and untimely

death of Chiefs and the dangers of disputed successions show how desirable it is that you should nominate your successors beforehand. The places of those loyal gentlemen whose loss we deplore are filled by a younger generation, whose duty and whose privilege it must be to maintain the traditions of their fathers and to prove themselves worthy of the high position to which they have been called.

These years, I am glad to say, have been years of peace, of prosperity, of progress. As I rode up from the plains to your pleasant hills, I was im-

General Progress. pressed by indications of order and wealth on every side. Even at this late time of the year the road was crowded with traders; the fields showed signs of careful cultivation; the villages through which I passed seemed populous and well cared for. I can honestly congratulate you on the marked progress which has been made throughout your States. The past year has been, I am told, one of unprecedented prosperity. No serious sickness has decimated your people. An abundant harvest has rewarded the cultivator's toil. The increase of trade has been really marvellous. No single case of dacoity or other organised crime has been reported during the year. These are blessings not to be lightly estimated. They are due, in the first place, to the establishment of peace under the tolerant and beneficent rule of the British Government, and scarcely to a less degree to your own efforts to promote the welfare of your people. Most heartily do I congratulate you all on the prosperous condition of your country. Most sincerely and with a good hope do I trust that this prosperity will continue, and, in order that it may do so, I recommend you to turn your attention among other matters which I shall mention later on to the introduction of new methods of cultivation. You have seen how successful your Superintendent has been with his fruit-garden and how potatoes and wheat flourish in your States. I am pleased to hear that the general practice of carrying arms has been discontinued in your States; at all events in undisturbed tracts not on the frontier. The mere possession of arms often leads to unpremeditated acts of violence.

And before I say anything more, I wish to remind you of a fact which your Superintendent has no doubt constantly impressed on you. It is this, that the interests of the Imperial Government, of the Chiefs, and of the people of these States are the same. You, Chiefs, are the fathers of your people. Your first duty is to promote their happiness. So long as they are prosperous and contented, so long as you rule them justly and wisely and see that they are not oppressed by your subordinates, so long will you find your own power and your own happiness increased.

I know that many, I trust that all, of you have learnt to understand the responsibilities of your position. I cannot too strongly express my satisfaction at the knowledge that you are learning to spend your revenues on, and devote time and forethought to, such matters as the improvement of communications in your States. I select for special commendation, in the presence of their fellow-Chiefs, the *Sawbwas* of Yawngghwe and Mongpawm, who have been conspicuous for their efforts in this direction. Nor must I omit mention of the *Ngwegunhmu* of Hsamong Khan, whose good service in maintaining communication through his State has been brought to my notice by the Superin-

tendent. Each of these Chiefs has received a signal mark of distinction from His Excellency the Viceroy.

I am glad that you have shown appreciation of the efforts made to cure and prevent sickness. The establishment of dispensaries and the appointment of vaccinators are means to this end of which you have,

Medical Aid. to some extent, availed yourselves. The interest which you have taken in vaccination and the large number of people who have been successfully vaccinated are highly satisfactory. I should like to see many more dispensaries established at different places in this State; but it is for you to find the means of doing this. It may not be possible for every State to support its own dispensary; but if several neighbouring States were to unite their resources, I believe that much might be effected. Apart from this there is, however, one small and apparently insignificant way in which good might be done. Fevers of a deadly type are prevalent in many parts of your country. You will do much to reduce the mortality from these diseases if you can induce your people to take advantage of the efforts about to be made to popularise the use of quinine. I merely mention this, leaving the Superintendent to explain more fully the details of the scheme which will be placed before you. Again, hundreds of your cattle die from epidemic diseases, yet with due care it is possible to mitigate the ravages of such diseases. I should be glad for your own sakes if you would consider whether it would not be possible for you to engage the services of qualified veterinary assistants and adopt some rules for the segregation of infected cattle. Here, again, individual States might be unable to do much. But if several States were to combine, they might be able to support a travelling cattle doctor who could go about among the people and teach them how to prevent and cure disease. On this point, also, the Superintendent will have more to say to you.

I turn now to the question of the tribute which you pay to the Imperial Government. You are all aware that the sum which you contribute towards

Financial Affairs. the cost of the administration is a very small part of the amount which the Government spends in maintaining peace and in carrying out public works in these States. The exact sum which you should be required to pay was fixed after anxious consideration. I am glad that it was decided to impose only a very light assessment in order that funds might be available for expenditure on public works, and that you might not be forced to discourage the growth of population by heavy imposts. It was gratifying to me to learn that the whole of the tribute of the current year had been paid into the treasury before the end of March. Your Superintendent, however, informs me that there is still room for improvement as regards punctuality of payment. I rely upon you to meet his wishes in this matter. The importance of keeping accounts and of preparing estimates of the revenue which you expect to receive, and of the manner in which you propose to spend it, has been impressed on you. The form in which these estimates should be prepared will be settled before you return to your homes. I look to you to see that the simple requirements of the Government in this matter are complied with; and especially to take care that only authorised taxes are levied, and that careful assessment-rolls of each circle are compiled. It is of the first importance that the people should know what they have to

pay and to whom they have to pay it and that unauthorised exactions should entirely cease.

I wish also to take the opportunity of speaking to you about the education of your sons. In former days the cadets of your families were educated at

**Education of
Chiefs' Sons.**

the Burmese Court. Now, I should like you to send your sons to Rangoon, where they would be properly taught and looked after. But as I understand that you are reluctant to do this, I will not press it, though I may tell you that there are many Shans in Rangoon and elsewhere in Lower Burma, and that they are as healthy as other people. However, Rangoon is a distant place and you may well prefer to keep your sons nearer to their homes. I therefore intend to establish a school at Taunggyi under the eyes of the Superintendent, and I expect that many of your sons will be sent to it. Here they will receive the training which they need to fit them to govern their States in due course.

One word more and I will pass to other topics. It is now some years since rules were issued to regulate the administration of criminal justice. These

Criminal Justice.

rules made as little change as possible in the customary law of the States. They merely required that every accused person should have a fair trial and an opportunity of defending himself, and that barbarous and excessive punishments should not be inflicted. I am glad to hear from your Superintendent that these rules are in all essential points properly observed throughout the Shan States. The British Government does not tolerate anywhere in its dominions the execution of criminals for petty offences or the infliction of cruel penalties. And the cessation of these practices in States far and near, on this side of the Salween and beyond, is most satisfactory, and you must be careful that it continues. I regret to learn that the pledge, which you gave long ago, to discourage public gaming has been but imperfectly redeemed. Gambling gives rise to quarrels, thefts, and murders, and is a fruitful source of disorder. I do not wish to interfere with the innocent amusements of the people. But constant public gaming, which is the curse of these States, must be discouraged by every means in your power, and the Government will not regard with favour any Chief who allows public gaming in his State. You must also be careful that, while order is preserved in your own territories, you do not afford an asylum to outlaws from beyond your borders. You must do your best to prevent your people from committing crimes either in foreign territory or in adjacent districts of the province, and you must punish any persons who may commit such offences. Moreover, if criminals from foreign territory or from other parts of Burma enter your States, you are responsible for their arrest and delivery to the proper authorities.

Many of you have been to Rangoon and have seen with your own eyes material evidence of British power. All of you are aware of the ease with

**Permanence of
British Rule.**

which the Burmese Government was overthrown and with which peace and order were established throughout the Burmese Empire. Do not therefore, I warn you for your own sakes, listen to idle tales of the coming of Burmese Princes or of the restriction of British power. Be assured that no scion of the House of Ava can for a moment shake that power and that treasonable designs can result only

in the ruin of those who conceive them. I was especially pleased with the action of the Mongpan *Sawbwa*, who arrested a pretender calling himself the Teiktin Myat last year, and I feel confident that each one of you would follow his example should any person raise the standard of rebellion in your States. I have no doubt of your loyalty, but only wish to warn you that attempts may be made to shake it. Your presence here, and the cheerful alacrity with which recent demands on your aid have been received, are sufficient evidence of your confidence in the good faith and permanence of the Government in these States. But mischievous persons may try to deceive you, and I wish you to take home with you these words of mine and to remember them in case of need.

And now I bid you farewell. To-morrow I return to Rangoon; and, though I hope that I may in some future year again preside in this durbar and meet you all once more, yet other parts of this great province claim my attention and I may not have another opportunity of addressing you. However this may be, I wish to assure you that so long as you rule your States with wisdom and justice, so long as you listen to the advice of your Superintendent, who has been among you for so many years, and who has no wish but for your welfare, so long will you enjoy the support of the Government, so long will your houses stand on firm foundations. I take leave of you with every good wish for your prosperity and for the prosperity of your people, and with confidence that you and they will continue to merit the approbation of that gracious Sovereign whom it is our common pride and privilege to serve.

PRODUCTS OF THE SHAN STATES.

The following note on the products of the Shan States is taken from a paper on "The Prospects of the Shan States" read by Sir George Scott, K.C.I.E., Superintendent of the Southern Shan States, before the Society of Arts, London, on April 6, 1905:—

In the Southern Shan States the production of wheat and potatoes will be limited only by the demand. Experiments have also shown that barley and oats can be grown, and if this is the case and oats can be freely produced, there will be an immediate market beyond the Province, for the oats grown in India do not run to eat, and are useful as fodder rather than as producing grain. It is also obvious that, until there is rapid carriage, the English fruits and vegetables which grow freely wherever they are planted, cannot find a market in the plains. Strawberries can be had for nine months in the year; in fact, the fruit only ceases to form during the period of the heavy rains. Very creditable peaches and apples, and figs are to be had, and the quality of these will, no doubt, steadily improve when it is profitable to attend to the cultivation. Numbers of the chiefs in all parts have planted orchards and vegetable gardens, but at present they are an interest rather than a speculation.

Oranges have always done well in certain parts of the Shan States, and

considerable quantities are sold in Burma even now, notwithstanding the heavy rate of carriage, simply because there is no competition, and the price cannot be lowered to the disadvantage of the owners of the Shan orange groves. But with a reduction in the price there would no doubt be a huge increase in the amount sold. Cotton also grows very well in all the drier parts of the States. Great quantities are exported to Yunnan; in fact, almost all the mule caravans returning to China load up with cotton. The staple of the plant now grown is very short, but this seems a drawback which can easily be got over, and the addition of a new producing field may tend to steady the market and prevent the fluctuations which have been so disastrous to the cotton trade of late years. Coffee has been grown with great success by several chiefs, not with any view to sales, but merely as an interest to themselves. There seems no reason to doubt that plantations could be put down and extended to whatever size might be required. The cultivation of tea also seems simply to require the arrival of the planters. Wild tea plants are found in very many places, and all that is wanted is the knowledge necessary to produce a leaf fit for the European market or palate. It is undoubtedly the same with tobacco. At present large quantities are grown in the misty plains of Langkö and Nawng Wöp and elsewhere, but there is no attempt to cure the leaf. It is simply sun-dried, chopped up, and in this way is sold to local smokers. The settlement of planters of experience might not impossibly result in the production of a leaf as valuable as that of Sumatra, which is almost entirely sold for wrappers. Hemp, cinnamon, indigo, and a variety of rubber-producing creepers are also found freely; in fact, there seems very little that might not be grown, if only there were a means of getting the produce to the market in a reasonable time and for a reasonable price. The climate is one which would attract many British settlers if the States were made reasonably accessible.

Very little has been done so far in examining the mineral possibilities of the Shan States. Coal has been found in a great many places. It appears

Mineral Products. to be lignite in the majority of the fields, but it can hardly be said that the promise of the seams has been properly tested. A few examinations have been made by experts here and there in places at no great distance from the railway, but they have not been by any means exhaustive, or indeed much more thorough than can be effected by an officer travelling about in a tent with any sort of digging implements that can be got locally and used by people who have never done any pit sinking in their lives. The coal inspected has almost invariably been taken from close to the surface, and is weather or water worn, frequently both, so that the test cannot be said either to have been a fair or a final one. The best coal-tracts will, no doubt, be found in the limestone hills which run through the centre of the States; but when wheat and potatoes cannot be carried out of the country at a profit, the prospects of coal are very small. The coal found appears to belong to two distinct ages—the upper carboniferous and the tertiary systems. The former is probably not very valuable, but the tertiary coal might be of very good quality.

Iron ore is found in a great many places, and is worked locally in different parts of the States and converted by the neighbouring blacksmiths into *das*,

swords, daggers and choppers, and a variety of agricultural tools and household implements. It is characteristic of the Shan States and perhaps of the East generally that the miners never act as blacksmiths. The blacksmiths, in fact, in almost every case, live in their own villages at a considerable distance from the pits where the ore is obtained. The principal iron-working neighbourhoods are Hkesi Mansam, where swords and daggers are chiefly made, and Laihka, where the things made are more for agricultural or domestic use. In the neighbourhood of the Yawnghwe Lake there was formerly a considerable iron manufacture; in fact the State of Pôn-mu, which no longer has a separate existence, in Burmese times paid its tribute in the form of sword blades.

Grains of gold are found in practically every stream in the country. The sands of the Salween are full of it, and every year, in the intervals of agricultural work, parties of Shans encamp on the river and gather enough gold dust to have a festival in their village when they go home again. Many of them do the same thing in local streams, panning out the gold in the crudest possible way in shallow round wooden trays. There is, in fact, no doubt whatever of the presence of gold over very wide areas, and gold-bearing quartz even has been found in several places. The Burmese had a conviction of the existence of gold in great quantities in the form of nuggets in the Shwe-Thamin-Chaung, the Stream of the Golden Deer, in the Wa States, and sent up a large army to occupy the tract. This force had great trouble with the Wa, and was eventually practically annihilated, without even reaching the Golden Stream. A British party, which visited the actual spot in 1897, found nothing tangible, but it was only there for an hour or two, and had no experts with it. At present gold could only be obtained by the expenditure of considerable capital, but it seems not impossible that gold pockets, or deposits of nuggets, may be found. A Burmese clerk, in the course of an afternoon's washing and digging in the banks of a small stream, got nearly an ounce of gold. When this has been done once, it may be done by many, and possibly in many places. But the exploiting of the mineral resources of the Shan States must wait for the railway, no less than the cultivation of the soil, and agriculture will probably prove a more valuable, and certainly a more permanent, asset than gold-mining.

THE ADMINISTRATION OF THE SHAN STATES.

The British Shan States have an area of about 60,000 square miles, and are, therefore, a little larger than England and Wales.

In 1887 the Shan States were first defined under section 8 of the Upper Burma Laws Act. Several amending Notifications have been issued; and the Shan States as defined in 1905 are made up of:—

- (1) The Northern Shan States, under the supervision of the Superintendent, Northern Shan States.
- (2) The Southern Shan States, under the supervision of the Superintendent and Political Officer, Southern Shan States.

ADMINISTRATION OF THE SHAN STATES 773

(3) The Myelat, under the supervision of the Superintendent and Political Officer, Southern Shan States.

(4) States under the supervision of the Commissioner, Mandalay Division of Burma.

(5) States under the supervision of the Commissioner, Sagaing Division of Burma.

The following tables show the area, population, revenue, and tribute of the Shan States:—

I. THE NORTHERN SHAN STATES.

	NAME OF STATE.	Area in Square Miles.	Population.	Gross Annual Revenue (Rupees).	Annual Tribute Payable to Government of Burma (Rupees).
1	Helipaw	4,524	104,700†	344,624*	80,000
2	Tawngpeng	800	22,681†	124,000	20,000
3	North Hsen Wi	6,330	135,000	77,900*	10,000
4	South Hsen Wi	2,400	67,838†	67,508*	20,000
5	Manglam	3,000	40,000	10,000	500
	Total	17,054	370,217	624,131	130,500

† Census of 1901.

* Average of past five years.

(Tables continued on next page.)

II. THE MYELAT AND SOUTHERN SHAN STATES.

	NAME OF STATE.	Area in Square Miles.	Population.	Gross Annual Revenue (Rupees).	Annual Tribute Payable to Government of Burma (Rupees).
	MYELAT AND YAWNGHWE DIVISIONS:				
1	Haamongkam	297	12,561	15,808	8,300
2	Kyawkka	94	4,771	3,590	2,000
3	Kyong	24	2,340	2,226	1,350
4	Loi Ai	200	5,442	5,238	3,000
5	Loi Leng	1,600	30,731	16,444	9,600
6	Loi Maw	49	4,576	3,934	2,500
7	Maw	550	7,743	10,825	5,750
8	Mawding	40	3,755	3,564	2,000
9	Mawson	40	3,557	2,674	1,500
10	Nambkal	75	6,780	5,281	3,000
11	Nantok	29	778	976	500
12	Pangni	29	3,456	3,694	2,000
13	Pingfara	200	15,614	17,721	9,500
14	Pwela	102	7,866	9,454	4,500
15	Yongan	400	9,938	9,606	3,000
16	Yawnghwe	2,400	93,339	165,446	65,000
	CENTRAL DIVISION:				
17	Lawkasaw	4,048	24,839	25,562	14,000
18	Wairin	219	11,297	16,641	8,000
19	Samka	357	17,643	16,525	10,000
20	Haahing	471	10,584	10,570	6,000
21	Hoping	231	11,149	12,828	6,000
22	Namhok	106	6,687	8,465	4,500
23	Mong Pui	660	19,358	5,369	3,000
24	Nawng Wawn	42	4,865	6,427	2,500
25	Sakoi	102	1,387	1,518	500
	EASTERN DIVISION:				
26	Lai Hka	1,433	25,811	22,701	10,000
27	Mong Kung	1,643	30,482	31,455	15,000
28	Mong Nai	2,717	44,152	45,744	20,000
29	Mawmai	2,787	20,454	38,519	18,000
30	Mong Pawa	371	13,143	13,264	4,500
31	Mong Nit	368	9,113	12,046	4,000
32	Mong Pan	2,300	16,619	19,744	5,000
33	Kingkam	167	5,458	3,192	2,000
34	Mong Nawng	1,573	39,102	23,963	10,000
35	Kehai Mansam	632	22,062	15,384	8,000
36	Kong Loo	43	4,259	3,682	1,500
37	Mong Hsu	164	17,480	10,133	5,000
	KENOTUNG:				
38	Kingting	12,000	190,608	114,687	30,000
	Total	38,500	761,220	724,317	312,600

ADMINISTRATION OF THE SHAN STATES 775

III. STATES UNDER THE SUPERVISION OF COMMISSIONERS.*

NAME OF STATE.	Area in Square Miles.	Population (Approximate) 1901.	Gross Annual Revenue (Rupees) 1901.	Annual Tribute Payable to Government of Burma (Rupees).
<i>Under the Commissioner, Sogaing Division.</i>				
Hewangshup	550	6,300	9,500	
Singkalang Hkamti	983	1,200	1,200	
<i>Under the Commissioner, Mandalay Division.</i>				
Mong Mit with its Dependency } Mong Leng † }	3,561	30,000	112,000	20,000
Hkamti Leng	973			
Total	6,067	37,500	122,700	20,000

SUMMARY OF TABLES I, II, III.

STATES.	Area in Square Miles.	Population.	Gross Annual Revenue (Rupees).	Annual Tribute Payable to Government of Burma (Rupees).
I. Northern Shan States . . .	17,054	370,217	624,131	130,500
II. Myelat and Southern Shan States	38,500	761,220	724,317	312,600
III. States under Commissioners	6,067	37,500	122,700	20,000
Total Shan States	61,611	1,168,937	1,471,148	463,100

In May, 1886, a Notification was issued under the Statute 33 Vict., c. 3, constituting Upper Burma, except the Shan States, a Scheduled District.† At the same time the whole of Upper Burma, including the Shan States, was declared to be part of British India. By section 10 (3) of the Burma Laws Act, 1898, the Government of Burma is empowered, with the sanction of the Governor-General of India in Council, to define the Shan States from time to time,

* The figures given in this table are all which are available in the printed Reports of the Government of Burma on January 1, 1906.

† In 1906 Mong Mit was handed over to its native ruler, the Sawtha Kin Mawng, to be administered as a Shan State under the control and supervision of the Deputy Commissioner of the Iloilo Miao District.

‡ For definition of "Scheduled District" see Vol. I., p. 88.

and by section 10 (2) the Shan States are excluded from the operation of any Act not specially extended to them by the Local Government with the sanction of the Governor-General of India in Council.

Before the passing of the Shan States Act, 1888, the only way in which enactments could be extended to the Shan States was by Notification under section 8 of the Upper Burma Laws Act. This section, which was modified by Act XXI. of 1895 so as to provide for the extension of enactments to a specified local area in a State, gave no power to modify any enactment to suit the circumstances of the States. Except by the application of enactments in force in other parts of British India, there was no power to regulate the administration of the Shan States. The authority and powers of the Chiefs and of their officials were exercised without any legal sanction. Towards the end of 1888 the Shan States Act was passed for the purpose of placing these matters on a more satisfactory footing. This Act came into force on the 1st of February, 1889, and was superseded in 1898 by the Burma Laws Act. By section 11 of this latter Act the civil, criminal, and revenue administration of every Shan State is vested in the Chief of the State subject to the restrictions specified in the *sanad*, or order of appointment, granted to him. Under the same section 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 not opposed to the spirit of the law in the rest of British India. The customary law may be modified by any enactment extended under the Burma Laws Act, 1898, and it may be brought into accordance with justice, equity, and good conscience, and into conformity with the spirit of the law in the rest of British India by orders issued by the Local Government under section 12, sub-section (1), clause (d), of that Act. By the section last quoted power to appoint officers to take part in the administration of any State, and to regulate the powers and proceedings of such officers, is vested in the Government, and section 10 of the Act enables the Government to modify any enactment extended to a Shan State or to any specified area therein.

In the Northern and Southern Shan States the criminal and civil as well as the revenue administration is vested in the Chiefs, subject to the limitations laid down in their *sanads*, and to restrictions imposed by the extension of enactments and the issue of orders under the Shan States Act or the Burma Laws Act. The customary law of these States has been modified

by Notification No. 11, dated the 19th of November, 1890, which specifies the punishments which may be inflicted for offences against the criminal law, limits the infliction of certain punishments to the more heinous offences, and prescribes simple rules of procedure in criminal cases. The Superintendents exercise general control over the administration of criminal justice, and have power to call for cases, and exercise wide revisionary powers. All criminal jurisdiction in cases in which either the complainant or accused is a European or American or a Government servant, or a British subject not a native of a Shan State, is withdrawn from the Chiefs, and vested in the Superintendents and Assistant Superintendents. In the cases above mentioned the ordinary criminal law in force in Upper Burma, as modified by the Shan States Laws and Criminal Justice Order, 1895, is in force in these States. In such cases the Superintendents exercise the powers of a District Magistrate and Sessions Judge, and the Assistant Superintendents the powers of a District Magistrate, under section 30 and section 34 of the Code of Criminal Procedure, 1882. The Superintendents and Assistant Superintendents, if European British subjects, are also *ex-officio* Justices of the Peace in the States. The Superintendent has been specially empowered to withdraw from subordinate Magistrates such cases as he thinks fit. He can now also take cognisance of any criminal case, and try or refer it to a Subordinate Magistrate for trial. Each Superintendent and Assistant Superintendent exercises the powers of a Magistrate under the Foreign Jurisdiction and Extradition Act, 1881, parts of which are in force in the States. The Superintendents are also Marriage Registrars under the Indian Christian Marriage Act, 1872, and District Judges under the Administrator-General's Act, 1874. In the cases in which the Superintendents and Assistant Superintendents exercise criminal jurisdiction the Lieutenant-Governor is the High Court, except where European British subjects are concerned. The Lieutenant-Governor also exercises certain powers under the Christian Marriage Act. In regard to the administration of Civil Justice the customary law has been modified by Political Department Notification No. 3, dated the 16th of May, 1900, which confers original, appellate, and revisional jurisdiction on Superintendents and Assistant Superintendents, creates local Courts, and prescribes a simple procedure for such Courts. By a later notification the administration of Civil Justice in Taunggyi and in the military stations of Kengtūng and Fort Stedman is vested exclusively in the Superintendent and Assistant Superintendents. In

revenue matters the Chiefs administer their charges according to local rules and customs which have been modified only to the extent of limiting the power of Chiefs to alienate communal lands and to grant land to persons who are not natives of Shan States. Various Acts and Regulations were extended to the Northern and Southern Shan States (except those situated east of the Salween) by section 4 of the Order of 1895, and by subsequent notifications provisions of other enactments have been applied to some or all of the States. The Gaming, Excise, Cattle Trespass, and certain other Acts have been specially extended to the civil stations of Taunggyi and Lashio. Rules have been made for the levy of *thathameda* in Taunggyi, and rules for Taunggyi and Lashio under the Opium and Excise Acts. Rules under the Opium Act have also been issued for the Myelat.

In the Myelat a closer approach to the law in force in other parts of India has been prescribed. It was represented that the

The Myelat. Myelat had always been administered according to the law in force in the rest of Upper Burma, and it was thought desirable to maintain this practice. The criminal law in force in the Myelat is practically the same as the law in force in Upper Burma. In order that they may have jurisdiction in criminal matters the *Ngwegunhmus* and *Myozas* of all the Myelat States have been appointed Magistrates of the 2nd class. The *Myoza* of Hsa Mōng Hkam and the *Ngwegunhmu* of Pwela have been appointed to be Magistrates of the 1st class. In the Myelat the Superintendent and the Assistant Superintendent exercise the same criminal jurisdiction as in other States, except that their jurisdiction extends to all criminal cases and not merely to the cases in which Europeans and others above mentioned are concerned. The Assistant Superintendent has been empowered to hear appeals from sentences passed by Magistrates of the 2nd class. In other respects the law in the Myelat and the powers exercised by the Lieutenant-Governor, the Superintendent, and the Assistant Superintendent, are the same as in the rest of the Southern Shan States.

In the Shan States which are under the control of the Commissioner, Sagaing Division, the law is the same as in the North-

States under the Control of Commissioners.	ern and Southern Shan States, except that, instead of the Code of rules prescribed by Notification No. 11, dated the
--	--

19th of November, 1890, an order is in force restricting the power of passing capital sentences to the Chief of each State, and providing that in such cases the accused shall have a fair trial. Jurisdiction and powers similar to those exercised by the Super-

ADMINISTRATION OF THE SHAN STATES 779

intendents in the Northern and Southern Shan States are exercised in Hsawngsüp and Singkaling Hkämti by the Deputy Commissioner of the Upper Chindwin district. The powers of a High Court are exercised by the Lieutenant-Governor in the same cases as in the Northern and Southern Shan States. The Christian Marriage Act is not in force in these States.

As regards the Shan States under the control of the Commissioner, Mandalay Division, Möng Müt* with its dependency Möng Läng is being temporarily administered by the Deputy Commissioner, Ruby Mines district, as if it were a subdivision of that district, and is subject to the law in force in Upper Burma on the 25th of January, 1898.

Practically, no interference has been attempted in the administration of Hkämti Läng. The Notification which restricts the power of passing capital sentences to the Chief of the State is nominally in force, but no officers have been invested with powers in the State.

WORK OF CRIMINAL COURTS IN THE SHAN STATES.

The following table shows the work done by the Criminal Courts of the Shan States during the official year 1904-05:—

STATISTICS OF CRIME IN THE SHAN STATES, 1904-05.

	Northern Shan States.	Southern Shan States and the Myelat.	States under Commissioner, Mandalay Division.	States under Commissioner, Saguing Division.	Total.
Offences reported during year . . .	453	626	194		1,273
Remaining from previous year . . .	42	38	—		80
Persons tried, 1904-05	696	858	303		1,857
Discharged without trial or acquitted	188	318	51		557
Convicted	461	473	244		1,178
Committed or referred	3	16	—		19
Died, escaped, or transferred . . .	4	10	1		15
Remaining at end of year	40	41†	7		88

Of the 934 persons convicted in the Northern and Southern Shan States and the Myelat only one was sentenced to death and only two to imprisonment exceeding five years. The character of the sentences inflicted in the States under the supervision of Commissioners does not appear in the returns.

* This arrangement has recently been changed. See footnote on p. 775.

† Of these 4 were released on security.

WORK OF CIVIL COURTS IN THE SHAN STATES.

The following tables show the work done by the Civil Courts of the Northern and Southern Shan States and the Myelat in the exercise of their original and appellate jurisdiction, 1904-05. In the Shan States under the control of Commissioners there were no civil cases of importance.

STATISTICS OF ORIGINAL SUITS IN THE CIVIL COURTS OF THE SHAN STATES, 1904-05.

	Northern Shan States.	Southern Shan States and Myelat.	Total.
Balance from previous year	12	7	19
Filed during 1904-05	362	396	758
Total cases before the Courts	374	403	777
Disposed of during year	343	355	698
Balance	31	48	79
Value of suits disposed of during year . .	Rs. 37,937	Rs. 87,202	Rs. 125,139
No. of suits for less than Rs. 100 . . .	257	205	462
No. of suits for over Rs. 100 and less than Rs. 1,000	96	144	240
No. of suits for Rs. 1,000 and over . . .	9	22	31
No. of suits decided <i>ex parte</i>	46	18	64
No. admitted and compromised	99	34	133
No. struck off the file	9	12	21
No. otherwise disposed of	189	291	480

STATISTICS OF APPEALS IN THE CIVIL COURTS OF THE SHAN STATES, 1904-05.

	Northern Shan States.	Southern Shan States and Myelat.	Total.
Balance from previous year	3	—	3
Filed during the year	20	67	87
Total appeals before the Courts	23	67	90
Disposed of during the year	22	54	76
Balance	1	13	14
Decisions confirmed	16	21*	37
Decisions revised	1	10*	11
Decisions amended	5	9*	14
Cases remanded for retrial	—	10*	10
Cases compromised and otherwise disposed of	—	2*	2

* The results of trials in the Southern Shan States and the Myelat total up to 32; the total number disposed of during the year being 54. The two cases for which the results are not given were tried in the Court of the Assistant Superintendent, Kiangling, and no details of the results were forwarded to headquarters.

THE KARENNI STATES.

Karenni comprises five States, and is divided into Eastern and Western Karenni, the former consisting of the single State of Kantarawadi, the latter of the four States of Bawlakè, Kyebugyi, Nawng Palai, and Nammèkôn.

The area of the country is 4,830 square miles, and the population about 43,000 souls. The tract is bounded on the north by the Shan States, on the east by Siam, on the south by Lower Burma, and on the west by mountainous country which separates it from Burma proper.

The Karenni States are not part of Burma. They are feudatory States enjoying practical independence in their internal administration, but subject to the authority of the Government of India in regard to their external relations.

The relation between Burma and the Karenni States is defined in the *sanads* issued by the Governor-General of India in Council to the rulers of the States. These *sanads* are almost identical in form; and the following reprint will serve as a general statement of the obligations and responsibilities of Karenni chiefs in their feudatory connection with the British Government.

SANAD GRANTED TO SAWLAWI, MYOZA OF KANTARAWADI,
OR EASTERN KARENNI.

Whereas the Governor-General of India in Council has been pleased to recognize you as *Myoza* of the State of Kantarawadi, or Eastern Karenni, and to permit you at any time to nominate, subject to the approval of the Chief Commissioner, a fit person, according to Karenni usage, to be your successor in the *Myozaship*.

2. The Chief Commissioner of Burma, with the approval of the Governor-General of India in Council, hereby prescribes the following conditions under which your nomination as *Myoza* of Kantarawadi, or Eastern Karenni, is made. Should you fail to comply with any of these conditions, you will be liable to have your powers as *Myoza* of Kantarawadi, or Eastern Karenni, rescinded.

3. The conditions are as follows:—

(1) You shall pay tribute regularly every year. For the five years from the 1st January 1889 to the 31st December 1893, the amount of such annual tribute is fixed at Rs. 5,000. Thereafter the amount of the tribute will be subject to revision.

(2) You shall abstain from communication with States in or outside British India. Should necessity arise for communication with such States, you shall address the Chief Commissioner through the Superintendent of the Shan States.

(3) You shall accept and act upon any advice that may be given by the Chief Commissioner of Burma, either in respect of the internal affairs of Kantarawadi, or in respect of its relations with other States.

(4) You shall administer the territory of Kantarawadi, or Eastern Karenni, according to the custom of the country; you shall recognize the rights of the people and continue them in the same, and on no account shall you oppress the people or suffer them in any way to be oppressed.

(5) You shall maintain order within the territory of Kantarawadi, or Eastern Karenni, and keep open the trade routes within that territory. Should traders or caravans be attacked within the boundaries of the said territory, you shall pay such compensation as the Superintendent of the Shan States may fix.

(6) You shall, if the Superintendent of the Shan States so desires, keep an Agent, who shall reside at the headquarters of the Superintendent, and who shall keep him informed concerning the condition of the territory of Kantarawadi, or Eastern Karenni.

(7) In case of a dispute arising connected with any part of the Shan States, you shall submit the matter to the Superintendent of the Shan States and abide by his decision. Should any inhabitants of Kantarawadi, or Eastern Karenni, commit raids on any place outside the limits of Kantarawadi, or Eastern Karenni, you shall pay such compensation as the Superintendent of the Shan States may fix.

(8) If the Government of India wishes at any time to make a railway through any part of the territory of Kantarawadi, or Eastern Karenni, you shall provide land for the purpose, free of cost, and shall help the Government as much as possible.

(9) Opium, spirits, or fermented liquor, and other articles which are liable to duties of customs or excise when imported by sea into Lower Burma, or when produced in any part of Upper Burma to which the Regulations of the Governor-General in Council apply, shall not be brought from Kantarawadi, or Eastern Karenni, into Lower Burma, or into any such part as aforesaid of Upper Burma, except in accordance with the rules made by the Government and on payment of such duties as may be prescribed in those rules.

(10) You shall deliver up, on the requisition of an officer of the Government, any criminal who takes refuge in the territory of Kantarawadi, or Eastern Karenni; you shall aid officers of the Government who pursue criminals into the said territory; and in the event of offenders from the said territory taking refuge in any place beyond the limits of that territory, you shall make a representation to the Superintendent of the Shan States.

(11) You shall not exercise criminal jurisdiction over any British subject; in the event of any criminal charge being brought against any such person, you shall make a representation to the Superintendent of the Shan States.

(12) You shall not employ, or retain in the service of your State, without the consent of the Chief Commissioner of Burma, any one who is not a subject of your State.

CHAPTER XXI.

THE ADMINISTRATION OF THE CHIN HILLS

REFERENCES.

- Carey, Bertram S. and Tuck, H. N. The Chin Hills: A History of the People, our Dealings with them, their Customs and Manners, and a Gazetteer of their Country. Rangoon, Govt. Press, 1896, 2 vols., pp. 236 and 255. *Map, Illustrations.*
- Regulation No. V. of 1896. The Chin Hills Regulation, 1896, with Rules framed thereunder and Notifications. Rangoon, Govt. Press, 1897, pp. 14 + 11.
- The Burma Code. Third edition. Calcutta, Govt. Press, 1899, pp. 408-421.
- Reid, Surgeon-Lieut.-Col. A. S. Chin-Lushai Land: including a Description of the Various Expeditions in the Chin-Lushai Hills, and the Final Annexation of the Country. Calcutta, Thacker, Spink, 1893, pp. 235. *Maps, Illustrations.*
- Report on the Administration of the Chin Hills. Rangoon, Govt. Press. Annual.

For further references consult the Bibliographical Appendix.

THE CHIN COUNTRY.

The Chin Hills lie between latitude $21^{\circ} 45'$ north and 24° north and between longitude $93^{\circ} 20'$ east and $94^{\circ} 5'$ east. The area consists of a much broken and contorted mass of mountains, intersected by deep valleys, and is utterly devoid of plains and table-lands. The mountain ranges run generally north and south and vary in height from 5,000 to 9,000 feet. The exact boundaries of the Chin Hills have never been defined. The district lies on the western frontier of Burma, and is bounded on the west by Manipur, Assam, and Bengal. The Burma Census Report, 1901, gives the area of the Chin Hills proper as 8,000 square miles and of the Pakôkku Chin Hills as 2,500 square miles.

The principal rivers of the Chin Hills are the Manipur, the Boinu, the Tyao, the Tuivai, the Tuinan, and the Nanpathi. All these rivers are fordable during the dry season, except the Manipur, which below Kwanglui is rarely fordable.

The geology of the country has never been closely studied. The surface soil is usually either a rich loam or disintegrated shale; but in the virgin forests a thick coating of decayed vege-

table matter is found, and it is this coating which produces such excellent rice in the north, and which renders the task of road-making over the higher peaks so difficult. An immense bed of shale of great thickness appears to form the backbone of the hills. Coal has been found in the hills on the west of the Kabaw valley, but only in small quantities and of inferior quality. The limestone which crops up in Burma and is so common in the Shan States appears to be rare. There is but little indication of volcanic action, and the hills seem to be universally water-worn.

The Chin Hills are almost completely covered with forests, and, except where these are extremely dense, the ground is thickly clothed with various kinds of grasses. The principal forest trees are the ash, oak, pine, rhododendron, teak, laurel, bamboo, alder, and maple.

Although the climate of the Chin Hills, at an elevation of between 2,500 and 6,000 feet, is temperate in character, it has not proved healthy, for even in the cold season malaria and other fevers are prevalent. This is attributed to the sudden changes of temperature, for in January, in the middle of the day, the thermometer will register 140° in the sun, and at night and on the ground it will fall as low as 12° Fahrenheit. The seasons are not so regular as they are in Burma proper, and rain falls in every month of the year. The rainy season generally extends from the beginning of June to the middle of November, but the rainfall varies considerably in different parts of the country.

THE CHIN PEOPLE.

The Census of 1901 gives the population of the Chin Hills as follows:—

TRACT.	Male.	Female.	Total.
The Chin Hills	43,167	44,022	87,189
The Pakökkes Chin Hills . . .	6,549	6,567	13,116
Total	49,716	50,589	100,305

To the brief account of the Chins given in Chapter III. (Vol. I., pp. 66 and 67) may be added the following paragraphs, which are taken from *The Chin Hills* by Bertram S. Carey and H. N. Tuck:—

The Chin Hills are peopled by many clans and communities, calling themselves by various names and believing themselves to be of distinct and superior origin. It is evident, however, that all belong to one Division of the Chins. and the same, the Kuki race, which, owing firstly to the want of a written language and secondly to the interminable inter-village warfare, has split up and resulted in a Babel of tongues, a variety of customs, and a diversity of modes of living.

Thus Falam, the capital of the Shunklas, is but a long day's march for a Chin from the heart of the Siyin country, yet a border villager has to be requisitioned to interpret the words of the Siyin to the Shunkla and *vice versa*, and the appearance of

Chin Characteristics. the tribesmen differs as widely as their language. Throughout the vast apparent difference in detail of the manners and customs of the tribes, the main Kuki characteristics can be universally traced and may be briefly enumerated as follows. The slow speech, the serious manner, the respect for birth and the knowledge of pedigrees, the duty of revenge, the taste for and the treacherous method of warfare, the curse of drink, the virtue of hospitality, the clannish feeling, the vice of avarice, the filthy state of the body, mutual distrust, impatience under control, the want of power of combination and of continued effort, arrogance in victory, speedy discouragement and panic in defeat are common traits throughout the hills.

Physically the Chin is a fine man, taller and stouter than his neighbours in the plains on both the north and east, and although he falls short of the build of the Pathan, his measurements compare more than favourably with those of the Gurkha. The measurements of individual Chins are so uneven that it is hard to strike an average, but should the nature of the Chin in course of time become amenable to discipline, a recruiting officer would have no difficulty in enlisting men averaging 5 feet 6 inches in height with chest measurement of 35 and calf measurement of 15 inches. It is no uncommon occurrence to find men 5 feet 10 inches and 5 feet 11 inches in height with chest measurement of 39 inches and with a calf measurement of the abnormal size of 16 inches.

Individual tall men are found in the Kuki villages immediately south of Manipur and among the Soktes, but the finest built men in the hills are the Siyins, Hakas, and independent southerners.

The Siyins, though small in stature, are splendidly limbed and are the most evenly built tribe in the hills, though the Hakas and independent southerners are as a whole taller and produce the finest individual men. The late Lyeirwa of Kotarr and Lalwe of Klangklang are perfectly proportioned giants with a magnificent development of muscle.

The worst built and puniest men in the hills are found amongst the Tashons, who are as a whole distinctly inferior to the other tribes in physique and in carrying capability. There is a saying in the north "one Siyin is equal to three Tashons, but then there are over 15 Tashons to every Siyin."

In the Minlédaung group of villages many of the inhabitants are dwarfs. In the Norn tract of Tashon country the inhabitants are a wretched lot, much afflicted with goitre, amongst whom may be seen cretins who crawl about on all fours with the pigs in the gutters. At Dimlo in the Sokte tract leprosy has a firm hold on the inhabitants.

The carrying capacity of the Chin equals that of the Bhutia and is superior to that of the Gurkha inasmuch as he is faster. It is not uncommon to find

Carrying Capacity. a man carrying 180 lbs. for a 12 mile stage, and such a load as 60 lbs. appears hardly to affect the ordinary pace of the carrier, who will march 20 miles in the day.

The Chins and the southern Kukis of Manipur being the same race, living in the same class of country and under the same conditions, are, as is to be expected, equally good carriers; but for short distances neither are as fast as the most satisfactory of all the foreign coolies who have worked in the Chin Hills, the Tunkal.

The Chin man's method of carrying is on the back, the load being attached to a wooden yoke, which fits on the back of the neck and the strain relieved by a band which passes through the ends of the yoke and round the brow of the head. The women invariably carry their loads in large bamboo and cane baskets which rest against the shoulder blades and which are supported by a brow band.

Except on the western border where Whenohs and Yahows are found with beards, the Chin is not a hairy man, and hair on the face is seldom seen in the north. In the south a mustache and small pointed beard are the most that can be grown. These are only affected by elderly men, as the presence of hair on the face is objected to by the women, and this slender growth is consequently plucked out with nippers by all the young men.

The extreme dirtiness of the body has led it to be popularly believed that the Chins never wash; but this is a mistake, as they usually do so whenever

Personal a favourable opportunity occurs, such as when crossing
Uncleanliness. a stream after the sun is well up. But having washed, they are as dirty as ever again within a few hours. They

come in perspiring from a journey and from the fields, sit round a smoky fire, and then lie down with their faces on the floor or on a block of wood which is never cleaned, and in the morning they are again black with sweat, soot, and grime. Slaves and others working in the fields perspire freely and the dust gets caked on the face and person, and a week's collection may coat the body before a favourable chance for a wash occurs.

The villages in the Chin Hills may be divided into three types, the village of the nomadic jhoomer, the village of the professional raider, and the per-

Different Kinds manent village of those who are sufficiently powerful to
of Villages. resist attack, or who pay blackmail to insure immunity from raids or tithes to the powerful in return for protection.

The only nomadic jhoomers in the Chin Hills are Thados subordinate to the Kanhow Chief, who reside in the heavy timber on the eastern slopes of the Letha range. These people jhoom and grow rice,

Jhoomers, or and as they have to jhoom fresh land yearly they constantly move the village-site and therefore content
Taungya-cutters. themselves with living in bamboo huts thatched with grass, bamboo leaves, or split bamboo stems, and make no attempt to improve the village by planting trees, cutting paths or making compounds.

These jhoomers form an unimportant community in the Chin Hills, as the

country is not favourable for rice jhooming, the heavy timber on the eastern slopes of the Letha range demanding excessive labour and the bamboo jungle such as is found in Lushai and in the vicinity of Lunglen on the south of Manipur being very rare.

The village-sites of the professional raider, and also the villages of those regularly raided, were chosen solely for the defensive advantages which they

Villages of Raiding Tribes. offer. All such matters as soil, water-supply and shelter from the wind were secondary considerations. Except in the far south and south-west, which is practically outside our sphere of control, our occupation of the hills has had such an effect in putting a stop to raids and the prosecution of blood feuds that the people by almost universal consent have ceased to keep in repair the artificial fortifications of the villages, and in many cases they have left their fortified and uncomfortable strongholds and have settled down near water, on good soil, and in sheltered positions.

When suitable and sufficient soil is found to raise enough grain for their wants the people fix on the site for the village. When they are not habitual

Ordinary Villages. raiders or nomads, the most important points connected with the choice of site are shelter from the high winds, proximity to running water and the fields, and capacity for defence. The village should also be so situated as to catch the morning sun.

When the site is chosen, the village is marked off in compounds, and each household constructs its own platforms, build its own house, and plants its own hedges or in lieu builds a fence.

As the village is nearly always placed on the side of the hills, it is necessary to excavate and make a level platform for the compound, and thus a series

Plan of Villages. of platforms are cut in the face of the mountain. Each platform is surrounded with a timber fence or a cactus hedge and often with both. As there is usually no scarcity of sites, each house has a kitchen garden in the compound.

Sufficient space is left between each compound for a public road, which admits of persons proceeding in single file, and as in course of time the heavy rains pour down the side of the hill and turn the village paths into canals, they are often in a few years cut to a depth of 4 and even 6 feet. This adds to the fortifications of the village.

Usually water is carried into the villages by troughs or wooden leads so as to save the trouble of fetching water from the springs. These leads may

Water Supply. frequently be seen winding a mile and more round the hills, spanning deep nullahs and passing over broken ground, before entering the village, when branch leads conduct the water to the large wooden trough which is found in every compound. The branch lead is only used when water is required, and the surplus water after passing through and round the entire village in the main leads wastes itself below the village.

The leads are hewn out of the trunks and boughs of trees and are ordinarily 15-foot boughs scooped out. When it is required to divide the water-supply into two streams, a forked bough is procured, and both prongs being hollowed out, the water branches off through each and is carried on in single

pipes as before. The water-supply is of common interest, and all assist in the work of construction and maintenance of the leads.

The village fortifications are also a public matter and all assist in building up the fortified gates and in digging the necessary rifle trenches outside the village fence. The lie of the country and thickness of jungle being equal, the Chin expects attack from below and not from above his village, as it is hard for an enemy to approach from above without being seen, and surprise is the one tactic of the Chin.

Village Defences. Rifle-pits flush with the ground and hidden by growing grass and ferns bar all paths at a distance of from 100 yards to 2 miles from the village. Their presence may be usually suspected when the ground suddenly becomes open and the trees and undergrowth have been removed. These rifle-pits are often of very considerable length and never terminate except in a nullah or below the crest of a hill, to insure if necessary the escape of the defenders, whom it is impossible to hit unless they show above the trench when firing.

The village gate is so narrow that only one man can enter at a time, and to reach this gate a zigzag path and often a tunnel has to be entered. At each turn in the path and at both sides of the gate are stone and wooden sun-gars and stockades overgrown with briars, cactus, and thorny bushes, which render entrance in face of resistance impossible. Besides the gates, cactus and stiff thorn hedges, palisades, stone breastworks and rifle-pits surround and defend the village.

TRADES AND INDUSTRIES OF THE CHINS.

The Chin relies on agriculture for his subsistence, his crops being divided into four classes, grain, pulses, roots, and vegetables. All cultivation is done on the hillside, and by manual labour. Cattle are never used in preparing the soil or in bringing the crop to the village.

The staple crop varies according to the rainfall, and a variety of different crops are put into the ground in order to avoid starvation if the staple crop should fail. The **Agriculture.** ordinary dangers to crops are plagues of rats, deluges of rain, blight, and the ravages of bears, monkeys, and birds.

Most fields are partially terraced by trunks of trees and by stone supports, the latter constructed with great labour. Without these the surface soil and the crops would be washed into the gullies during the rains.

Until within recent years it was necessary to proceed armed to the more distant fields, which were cultivated, sown, and the crop gathered under the protection of armed sentries. As the science of Chin warfare is surprise, and the most successful of all tactics is to ambush the cultivator either going to or from or whilst working in the fields, nine out of every ten persons

whose heads were formerly carried off lost their lives in or near the fields.

The fields are not worked in common. Each man has his own fields, and each cultivates his own patch. The fields are not fenced, and no one hesitates to shoot strange cattle which stray into his fields. It is considered lawful by the Chins to shoot a thief caught in the act of stealing crops either by day or night.

The manufactures in the Hills for export are confined to cane mats, bamboo mats, and baskets. These are made chiefly by the inhabitants on the slopes of the ranges bordering on Burma. For local use, spears, das, axe-heads, hoes, and knives are manufactured. The iron is procured from Burma, and the blacksmiths are found throughout the hills; but Wunhla in the Southern Chin Hills is the only village which has made its name famous for iron work. The melting of brass and telegraph wire is universally practised, and armlets and bangles are made by pouring the molten lead into moulds made of a mixture of paddy husks and clay. Telegraph insulators, which are made of steel, are much prized by the Chins, who fashion them into excellent knife-blades. Rain-coats and rain-hats are made everywhere. The coat is made out of the bark of a tree, and the hat is made of bamboo, bark, and date-palm leaves.

The Chin, alive as he is to his own interests, is not a born trader like the Burman, and before the British occupation, if we except the barter of beeswax for salt, the staple trade of the Hills was the raiding and ransoming of Burman captives, which brought to the Chin, with but little trouble or risk, guns, gongs, salt, iron, and any other luxury he desired. Money earned by carrying for the Commissariat Department and by labour on public works has now taken the place of slaves and plunder. The principal unmanufactured exports from the Hills are beeswax, the outside husk of the ear of Indian corn, which is largely used by the Burmans for covering cheroots, cane mats, and the horns of the buffalo, deer, and other animals. Rhinoceros horns fetch a good price in Burma, where they are much used in compounding medicines.

The principal articles of the import trade are salt and iron, which are the only two things absolutely necessary to the Chin, and what may be termed luxuries, such as cattle, gongs, brass and iron pots, beads, ornaments of various kinds, silk thread, cotton yarn, plaids, and, in times of scarcity, rice.

The internal trade is not large, and consists for the most part

in the exchange of beads for live stock, and in the conversion of guns, gongs, and similar valuables into grain, when the crops of a particular village have failed.

BRITISH OCCUPATION OF THE CHIN HILLS.

Some idea of the uncivilised condition of the Chin Hills prior to the British occupation may be gathered from the following passage from Carey and Tuck's *The Chin Hills*. The passage was written in 1896:

The Chin Hills
under Native Rule.

"Raids are dying out because we have dealt with raiders with a very heavy hand. They will occasionally be heard of, for the people love them, and can no more be immediately weaned from head-taking than can the Burmans from dacoity; but the old blood feuds, if not dead, are now dormant, and the cruel, relentless ravages into Burma are a thing of the past. Amongst themselves the people had innumerable blood feuds, which were handed down from generation to generation. Often these blood feuds originated in a quarrel over the price of a *mithun*, the ownership of a field, the division of inheritance, the price of a wife. The quarrel led to blows, the blows to blood. The feud was then started, and blood was avenged in blood, only to be avenged again in the same way. Not only did the feud necessitate the spilling of the blood of the descendants of the original disputants, but whole villages became involved, and innocent blood was as freely spilled as that of the families at feud. When first we came to the Chin Hills, it was no uncommon thing to hear of forty and fifty persons of the same village having been killed in the five previous years whilst hunting, fishing, and cultivating.

"No one was safe: the women worked in the fields guarded by the men; no one ever knew when raiders from many villages at feud with theirs were lying along the paths, and pickets kept guard night and day on the approaches to the villages."

The occupation of the Chin Hills by the British was due to the necessity of protecting the plains of Burma from the constant raids of the Chin tribes. It was found in practice that nothing short of complete occupation of the Hills could provide a remedy for the raiding. The Hills were first occupied in 1888, but it was not until 1896 that a condition of complete peace was established throughout the country. The pacification was accomplished chiefly through two agencies, the opening up of the country by means of roads and bridges, and the gradual

Cause and Progress of
British Occupation.

disarmament of the tribes. The total number of firearms taken from the Chins amounted to about 7,000. The Government, however, allows a certain number of licensed and registered guns to remain in the hands of the Chins, at the rate of about one for every ten houses.

Referring to the effects of the British occupation, Sir George Scott says, in the *Gazetteer of Upper Burma and the Shan States*:

Effects of British Occupation.

"Now [1900] not only are the plains undisturbed, but the hills themselves are quite peaceful. Raids are unknown, and scarcely any crimes are committed, so that the Chin Hills are actually more secure than many parts of Lower Burma. Roads, on which Chin coolies now readily work, have been constructed in all directions. The rivers have been bridged. The people have taken up the cultivation of English vegetables, and the indigenous industries have been largely developed. British officers now tour about with escorts of only four or five men in places where formerly they could only go with columns. Burmese peddlers wander unmolested all over the hills, and the Chins themselves not only visit, but settle in the plains."

In recent years the Chins have shown an increasing desire for education and permanent employment.

THE ADMINISTRATION OF THE CHIN HILLS.

The general policy observed by the Government of Burma in administering the Chin Hills has been to protect the plains of Burma from raids; to interfere as little as possible with the customs of the people and their system of tribal government; to prevent bloodshed and internal feuds; to advise the Chiefs and tribesmen, and to build up a sound primitive form of government; to punish severely all crime committed against Government servants and property; to demand tribute from all the tribes as a token of their fealty to the British Government.

For administrative purposes the Chin Hills are divided as follows: the Chin Hills, consisting of the Falam, Haka, and Tiddim Subdivisions; and the Pakókku Chin Hills. The administrative system is laid down in detail in the Chin Hills Regulation, 1896, of which the following abstract will serve to give a general idea. The Regulation and sixteen Indian enactments named in the Schedule of the Regulation constitute the body of law applicable to the Chin Hills.

The Chin Hills Regulation, 1896.

ABSTRACT OF THE CHIN HILLS REGULATION 1896.

[Chapter I. Title, commencement, extent, and definitions. Chapter II. Laws applicable in the Chin Hills.]

CHAPTER III.

HEADMEN AND THEIR POWERS.

5. (1) Subject to any general or special orders of the Local Government, the Superintendent may appoint and remove any headman, and may define the local limits of his jurisdiction and declare what clan, or village, or both, shall be subject to him.

Appointment and Removal of Headmen.

(2) Where a headman is appointed for a group of villages or clans, the Superintendent may declare the extent to and the manner in which the headmen of the villages or clans composing such group shall be subordinate to the headman of the group.

(3) In making a declaration under this section, the Superintendent shall be guided as far as practicable by local custom.

6. (1) Every headman shall, within the local limits of his jurisdiction, have general control, according to local custom, over the clan, or village, or both, declared subject to him.

Powers of Headmen.

(2) He may levy from such clan or village any customary dues, and may impose on them such punishments as are authorised by local custom:

Provided that no barbarous, excessive or unusual punishment shall be imposed.

(3) He shall be bound to keep the peace within the tract under his general control; to comply with all lawful orders received from the Superintendent or Assistant Superintendent; and to furnish on the requisition of the Superintendent or an Assistant Superintendent, on receipt of payment at rates to be fixed by the Superintendent, supplies of food or labour required by any public servant.

7. (1) A headman may try, according to local custom, any person subject to his general control, who may be charged with any offence other than an offence punishable under sections 121 to 130, sections 302 to 308, sections 341 to 348, sections 363 to 377, sections 390 to 402, and sections 438 to 440 (all inclusive) of the Indian Penal Code, or with abetment of, or attempt to commit, any of these offences, and may punish with fine in money or goods any person found guilty by him of any such offences as aforesaid.

Criminal Jurisdiction of Headmen.

(2) Nothing in the Indian Penal Code or in the Code of Criminal Procedure, 1882, shall apply to any proceedings of a headman acting in exercise of the powers conferred by this section.

8. A headman may try and decide according to local custom any dispute of a civil nature between persons subject to his general control, and may enforce his decision in accordance with such custom.

Civil Jurisdiction of Headmen.

CHAPTER IV.

JURISDICTION AND SPECIAL POWERS OF OFFICERS.

9. (1) The Chin Hills shall constitute a sessions division and a district for criminal, civil, revenue and general purposes, and the Superintendent shall be the Sessions Judge.

Chin Hills to constitute a Sessions Division and a District, and Superintendent to be Sessions Judge.

(2) As Sessions Judge the Superintendent may take cognisance of any offence as a Court of original jurisdiction without the accused being committed to him by a magistrate for trial, and, when so taking cognisance, shall follow the procedure prescribed by the Code of Criminal Procedure, 1882,

for the trial of warrant cases by Magistrates.

10. For the purposes of the Code of Criminal Procedure, 1882, the local Government shall exercise the powers of a High Court.

11. The local Government may, by notification in the *Burma Gazette*, invest any Assistant Superintendent with all or any of the powers of a Superintendent under this Regulation, and define the local limits of his jurisdiction.

12. (1) The Superintendent and every Assistant Superintendent exercising jurisdiction within the Chin Hills may try any suit or other proceeding

Civil Jurisdiction. of a civil nature between parties any one of whom is a Chin, according to such procedure as the Local Government may, by notification in the *Burma Gazette*, prescribe; and

(2) in the trial of any such suit or proceeding may exercise all or any of the powers which he might exercise in a suit or proceeding in which none of the parties is a Chin; and

(3) In deciding any such suit or proceeding shall have regard to local custom and to justice, equity and good conscience.

13. The Superintendent may withdraw any civil or criminal case pending before a headman or an Assistant Superintendent, and may either try it himself or refer it for trial to an Assistant Superintendent.

Power to impose Fines on Villages, &c., for Collusion with Criminals. 14. (1) Subject to the control of the Local Government, the Superintendent may take hostages from, or impose fines in money or goods on, any clan or village or any part thereof, if after inquiry he finds that any of the persons belonging to such clan or village have—

(a) colluded with, or harboured, or failed to take reasonable means to prevent the escape of, any person accused of, or under sentence of imprisonment for, an offence;

(b) suppressed or combined to suppress evidence in any criminal case;

(c) failed or neglected to restore stolen property tracked to their village or to take on the track beyond the limits of their village;

- (d) done any act hostile or unfriendly to the Government;
- (e) disobeyed the lawful orders of the Superintendent or of an Assistant Superintendent;
- (f) taken part in or abetted an attack on traders or other travellers, or the levy of or attempt to levy unauthorised dues or tolls; or
- (g) engaged in fighting with any other clan or village.

(2) The Superintendent may order the whole or any part of a fine imposed under this section to be given as compensation to any person to whom damage or injury has been caused, directly or indirectly, by the act in respect of which the fine is imposed.

(3) When in pursuance of an order passed under this section a person has received compensation for injury out of the proceeds of a fine, all right of such person to compensation based on the same injury shall be barred.

15. When within the area occupied by any clan or village a person is dangerously or fatally wounded by unlawful attack, or the body of a person reasonably believed to have been unlawfully killed is found, the members of such clan or village shall be deemed to have committed an offence under the last foregoing section unless they can show that they—

- (a) had not any opportunity of preventing the offence or arresting the offender; or
- (b) had used all reasonable means to bring the offender to justice.

16. In the event of any clan or village acting in a manner hostile or unfriendly to the Government, the Superintendent may, subject to the control of the Local Government, detain all or any members of such clan or village, deport them from the Chin Hills for life or for any shorter term, detain or confiscate their property, debar them from access into territory outside the Chin Hills, and prohibit all or any other persons from entering the area occupied by such clan or village.

17. Every headman who abuses any of the powers conferred upon him by this Regulation, or neglects to obey any reasonable order of the Superintendent, shall be liable by order of the Superintendent to pay a fine not exceeding fifty rupees, or to be suspended or dismissed from office.

18. When the Superintendent is satisfied that a dispute likely to cause a feud, breach of the peace, or any offence affecting the human body or against property exists, he may inquire into the dispute and pass such order as he may think fit, having regard to local custom and to justice, equity and good conscience.

19. No new village shall be formed without the consent of the Superintendent, who may, for reasons to be recorded in writing, prohibit the formation thereof.

Penalty for Abuse of Authority or Disobedience of Orders by Headman.

Power to decide Disputes likely to lead to Feuds.

Power to prevent Formation of New Village.

20. Whenever it seems to the Superintendent to be expedient on military or other grounds, he may, by order in writing, direct the removal of any village to any other site, and, with the sanction of the Local Government, may award to the inhabitants thereof such compensation for any loss which may have been occasioned to them by such removal as, in his opinion, shall be just.

**Power to direct
Removal of Villages.**

21. (1) When any person is known or believed to have a feud, or has occasioned any cause of quarrel likely to lead to bloodshed, dacoity or robbery, the Superintendent may require such person to reside beyond the limits of the Chin Hills or within those limits at such place as the Superintendent may deem desirable.

**Power to require
Persons to remove.**

(2) No order requiring a person to reside beyond the limits of the Chin Hills shall be made without the previous sanction of the Local Government.

22. When the Superintendent is satisfied that the presence of any person (not being a public servant or a Chin) is injurious to the peace or good administration of the Chin Hills, he may, for reasons to be recorded in writing, order such person to leave the Chin Hills within a given time.

**Expulsion of Cer-
tain Persons from
Chin Hills.**

23. Whoever contravenes the provisions of section 19, or disobeys an order under section 20, or a requisition under section 22, or an order under section 22, may, on conviction by a Magistrate, be punished with imprisonment for a term which may extend to six months, and shall also be liable to fine which may extend to one thousand rupees.

**Penalty for Breach
of Certain Orders.**

24. When the Superintendent is of opinion that it is necessary for the purpose of preventing culpable homicide (whether amounting to murder or not), grievous hurt, dacoity or robbery to require any person to execute a bond for his good behaviour, he may order such person to execute a bond, with or without sureties, for his good behaviour during such period, not exceeding three years, as the Superintendent may fix.

**Security for the
Prevention of Crime.**

25. When a feud or other cause of quarrel likely to lead to bloodshed or violence exists, or is, in the opinion of the Superintendent, likely to arise between two clans, villages or families of Chins, the Superintendent may order all or any of the persons belonging to such clans, villages or families, or of either of such clans, villages or families, to execute a bond, with or without sureties, for their good behaviour during such period, not exceeding three years, as he may fix.

**Security from
Tribes, &c.**

26. When an Assistant Superintendent duly authorised under section 11 passes an order under section 24 or section 25, he shall at once submit a report of his proceedings to the Superintendent.

**Report by Assist-
ant Superintendent.**

27. (1) The commission or attempted commission, or the abetment by a person who has executed a bond for his good behaviour under section 24, of any offence affecting the human body or against property shall be deemed to be a breach of such bond.

Breach of Bond.

(2) If, while a bond executed under section 25 is in force, the life of any person belonging to any clan, village or family concerned is unlawfully taken or attempted to be taken, or the property of any such person is unlawfully attempted to be taken, by or with the abetment of any person or persons belonging to the other clan, village or family, the Superintendent may declare the bonds of all or any of the persons belonging to such other clan, village or family and of their sureties (if any) to be forfeited.

28. (1) If any person ordered to execute a bond for his good behaviour under section 24 or section 25 does not give the security required on or before the date on which the period for which the security is to be given begins, he shall be committed to prison, or, if he is already in prison, be detained there until such period expires, or until within such period he gives the security to the officer who made the order requiring it, or to the officer in charge of the jail in which he is detained, in which case he shall be forthwith discharged from prison.

(2) Imprisonment for failure to give security under section 24 or section 25 may be rigorous or simple as the officer requiring the security directs in each case.

29. When any person has suffered imprisonment for three years for failure to give security for his good behaviour under section 24 or section 25, he shall be released and shall not again be required to give security unless a fresh order is passed in accordance with the provisions of this Regulation.

30. (1) Any person who has, under the provisions of section 24 or section 25, given security, or been imprisoned for failure to give security, may be brought before the Superintendent if, on the expiry of the period for which security was required to be given, the Superintendent so directs.

(2) When the Superintendent thinks it necessary, for the purpose of preventing the commission of any offence affecting the human body or against property, to require security for a further period from any person so brought before him, he shall record a proceeding to that effect.

(3) The proceeding may be founded on the facts on which the original order to give security was founded, and it shall not be necessary to prove any fresh facts to justify an order to give security for a further period under this section; and such subsequent order, if passed, shall have the same effect and be enforced in the same manner as an order to give security under section 24 or section 25.

(4) Notwithstanding anything in this section, no person shall suffer, for failure to give security under this chapter, imprisonment for more than six years, or, without the sanction of the Local Government, for more than three years.

CHAPTER V.

SPECIAL RULES AS TO ARMS, AMMUNITION, OPIUM, AND FORESTS.

31. (1) The Superintendent may fix the number of firearms and the quantity and description of ammunition which may be possessed by any clan or village, and may issue licenses, either to such clan or village collectively, or to any of the persons belonging thereto individually, to possess the firearms and ammunition specified in the licenses.

(2) All firearms for which licenses have been issued shall be stamped and entered in a register.

(3) The Superintendent may grant a license to any clan or village for the manufacture of gunpowder.

(4) Any person who, not being licensed or not belonging to any clan or village licensed in that behalf, possesses any firearms or ammunition, or who exports from the Chin Hills any firearms or ammunition, or who manufactures gunpowder, shall be punished, on conviction by a Magistrate, with imprisonment which may extend to three years, or with fine, or with both.

(5) With the previous sanction of the Local Government, the Superintendent may direct that the foregoing sub-sections shall not apply to any tract or part of the Chin Hills, and may with the like sanction cancel any direction so made.

(6) The Superintendent may, by order in writing, prohibit all or any of the persons belonging to any clan or village from carrying darts, spears and bows and arrows, or any of those weapons, in any tract, to be defined in the order, if he is of opinion that such prohibition is necessary to the peace of such tract. Such order shall specify the length of time during which it shall remain in force.

(7) Whoever disobeys a prohibition under sub-section (6) shall, on conviction by a Magistrate, be punished with imprisonment which may extend to six months, or with fine, or with both.

32. No prosecution under the Upper Burma Forest Regulation, 1887, or any rule thereunder, shall be instituted against any Chin except with the sanction in writing of the Superintendent.

33. Whoever imports, cultivates, manufactures, possesses, sells or exports opium, ganja, bhang or charas in the Chin Hills, shall be punished, on conviction by a Magistrate, with imprisonment which may extend to one year, or with fine, or with both.

34. Whoever sells foreign fermented liquor or spirit to any Chin shall be punished, on conviction by a Magistrate, with imprisonment which may extend to three months, or with fine, or with both.

CHAPTER VI.

RULES REGARDING TAXES AND REALISATION OF FINES, &c.

35. Taxes shall be levied on all clans and villages at such rates and in such manner as the local Government may prescribe.

36. An order for the payment of any fine, or tax, or for the delivery of

any property, or for the performance of any act, may be enforced (1) by the seizure of any movable property or of any standing crops of the person against whom such order is made, or, when the order is made against a clan or village or family of Chins, of any person belonging thereto, or (2) with the sanction of the Superintendent or of an Assistant Superintendent, by the simple imprisonment, for a term not exceeding one year, of the person against whom such order is made.

[Chapter VII. Prohibition of appeals, Control and Revision, Power of Local Government to make Rules, Proceedings under Regulation not to be questioned, Delegation of certain powers.

Schedule. Enactments deemed applicable to Hill Tribes.]

FINANCE AND JUSTICE.

The Chin Hills are as yet in a very backward economic condition, and they have, therefore, practically no financial history.

Taxation. A small tribute is levied as token of submission to the Government of Burma, and a small sum is collected annually as house-tax. The whole sum realised from these two sources in the Chin Hills and in the Pakôkku Chin Hills during the official year 1904-05 was Rs. 45,859, equal to about \$15,000, which works out at about fifteen cents per head of the total population of the Hills. In the Chin Hills Rs. 600 were realised by the sale of three liquor licenses.

The work of the Civil and Criminal Courts in the Chin Hills is very light. In the official year 1904-05 there were in the Chin Hills only 87 criminal cases, involving 193 persons, brought to trial; and in the Pakôkku Chin Hills the figures were 27 cases and 67 persons. In the Civil Courts of the Chin Hills 222 cases were disposed of during 1904-05, and in the Civil Courts of the Pakôkku Chin Hills 28 cases.

CHAPTER XXII.

THE TRADE AND SHIPPING OF BURMA

REFERENCES.

- Report of the Committee on Indian Trade Statistics, 1905. Calcutta, Govt. Press, 1906. *Folio.* pp. 59.
- Report of the Rangoon Chamber of Commerce for the Years 1877-91. Rangoon: Printed for the Chamber at the British Burma Press, 1892.
- Report of the Rangoon Chamber of Commerce for the Years 1892 and 1893. Rangoon: Printed for the Chamber at the British Burma Press [1894 ?].
- Report of the Rangoon Chamber of Commerce, 1894-1905. One volume is published annually.
- Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports. Rangoon, Govt. Press. Annual.
- Report on the Maritime Trade of Burma. Rangoon, Govt. Press. Annual.
- Report on the Trade between Burma and the Adjoining Foreign Countries during the Year 1901-02 and the Triennial Period ending 31st March 1902. Rangoon, The British Burma Press, 1902.
- Report on the Trans-frontier Trade of Burma during the Year 1904-05 and the Triennial Period ending 31st March 1905. Rangoon, Govt. Press, 1905.

For further references consult the Bibliographical Appendix.

At the moment this volume goes to press the Government of India is taking steps for the revision of the form of its statistical publications relating to trade and cognate subjects, with a view to rendering the statistics more accurate and more generally useful. The changes to be effected are those recommended by a Committee on Indian Trade Statistics, which presented its Report in August, 1905. Hitherto in India it has been the practice to trace imports to the port from which they were shipped direct to India, and exports to the port at which they were discharged from ship-board. The result of this system has been to obscure the real course of Indian trade. For instance, in regard to imports the figures for Ceylon have been swelled by the inclusion of gold and unwrought copper, nearly all of which is in reality imported from Australia and merely trans-shipped at Ceylon. In regard to exports it is clear that under the present system there is no record of trade with any country which has no seaboard; and until recently all rice and other merchandise declared for Suez

"for orders" was credited to Egypt, whereas the goods really passed to the United Kingdom and to the Continent of Europe.

In preparing the following account of the trade of Burma, it has of course been impossible to go beyond the official record; but it must be noted that whatever errors exist in the official tables affect almost exclusively the figures in regard to the origin and destination of the trade, and do not touch the totals of articles and values.

AGGREGATE MARITIME TRADE OF BURMA.

The following tables show the total value of the imports into and the exports from Burma of merchandise and treasure in the foreign and coasting trade, exclusive of Government transactions, during the twenty years 1886-1905.

Foreign trade is the trade between any port in Burma and any port outside of Burma which is not situated in India; and coasting trade is the trade between any port in Burma and any port in India, and includes the trade between ports situated in Burma.

TOTAL VALUE OF THE IMPORTS OF MERCHANDISE AND TREASURE INTO BURMA IN THE FOREIGN AND IN THE COASTING TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS.

(In Rupees.)

Year ending March 31.	Foreign.	Coasting.	Total.
1886	34,365,008	49,371,681	83,736,689
1890	54,677,523	48,629,628	103,307,151
1895	35,231,782	61,429,110	96,660,892
1900	49,150,964	76,671,480	125,822,444
1905	91,395,618	88,735,800	180,131,418

TOTAL VALUE OF THE EXPORTS OF MERCHANDISE AND TREASURE FROM BURMA IN THE FOREIGN AND IN THE COASTING TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS.

(In Rupees.)

Year ending March 31.	Foreign.	Coasting.	Total.
1886	67,808,190	28,175,878	95,984,068
1890	77,815,420	27,145,843	104,961,263
1895	98,202,337	39,979,824	138,182,161
1900	101,879,290	84,555,150	186,434,440
1905	162,881,209	78,787,613	241,668,822

THE TRADE AND SHIPPING OF BURMA 801

TOTAL VALUE OF THE IMPORTS *PLUS* THE EXPORTS OF MERCHANDISE AND TREASURE IN THE FOREIGN AND IN THE COASTING TRADE OF BURMA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS.

(IN RUPEES.)

Year ending March 31.	Foreign Imports <i>plus</i> Foreign Exports.	Coasting Imports <i>plus</i> Coasting Exports.	Total Imports <i>plus</i> Total Exports.
1886	102,173,198	77,547,559	179,720,757
1890	132,492,943	75,775,471	208,268,414
1895	133,434,119	101,408,534	234,842,653
1900	151,073,254	161,226,630	312,299,884
1905	254,277,327	167,523,413	421,800,740

From the foregoing tables the following facts are obtained in relation to the growth of the maritime trade of Burma during the past twenty years.

The value of the Total Imports <i>plus</i> the Total Exports	increased by	134%
The value of the Foreign Imports <i>plus</i> the Foreign Exports	" "	148%
The value of the Coasting Imports <i>plus</i> the Coasting Exports	" "	116%
The value of the Total Imports	" "	119%
The value of the Total Exports	" "	151%
The value of the Foreign Imports	" "	165%
The value of the Foreign Exports	" "	140%
The value of the Coasting Imports	" "	79%
The value of the Coasting Exports	" "	179%

If we exclude treasure from the calculation and confine ourselves to the private sea-borne trade in merchandise, we get the following results:—

TOTAL VALUE OF THE IMPORTS AND EXPORTS OF MERCHANDISE (EXCLUSIVE OF TREASURE) IN THE FOREIGN AND IN THE COASTING TRADE OF BURMA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS.

(IN RUPEES.)

Year ending March.	Foreign Imports.	Coasting Imports.	Total Imports.	Foreign Exports.	Coasting Exports.	Total Exports.
1886	34,198,154	32,963,384	67,161,538	67,803,690	22,726,416	90,530,106
1890	54,543,948	41,081,720	95,625,668	77,813,576	23,840,051	101,653,627
1895	34,603,513	48,575,363	83,268,876	98,175,837	38,531,868	136,707,705
1900	48,697,969	59,419,209	108,117,208	101,874,995	81,184,244	183,059,239
1905	89,093,715	81,527,081	170,620,796	162,828,909	76,640,205	239,469,114

From the foregoing table it is seen that during the period 1886-1905 the Foreign imports of merchandise increased by 160%, the Coasting imports of merchandise by 147%, the Foreign exports of merchandise by 140%, and the Coasting exports of merchandise by 237%.

The following pages deal in detail with the various branches of the trade of Burma—the Foreign Trade, the Coasting Trade, the Trans-frontier Trade, Government Transactions, and the Import and Export of Treasure on private and on Government Account—and with the particulars of the articles imported and exported and the origin and destination of the trade.

THE FOREIGN IMPORT TRADE.

The following pages present an analysis of the Foreign import trade of Burma during the twenty-year period 1886-1905. It is to be noted that the figures throughout relate to merchandise only (the value of treasure being excluded), and that Government transactions are not included.

The following table represents the value of imports of merchandise into Burma from Foreign countries,—i.e., from ports outside

Value of Imports by
Countries of Origin.

British India; and it is important to remember that the country of origin is not necessarily that from which the merchandise originally came, but is the country from which it was shipped directly to Burma. Thus there is no doubt that a considerable proportion of the imports from Holland and Belgium comes in reality from Germany, and that a large proportion of the imports from the Straits Settlements originate in China. Similarly in regard to the imports from the United States, the figures given opposite the United States represent only merchandise shipped directly from United States ports to Burma, whereas it is known that a large amount of American products arrives indirectly, chiefly through the United Kingdom. It is impossible, from any data now available, to make such adjustments in the tables as would assign to each country its true share in the import trade of Burma; and the tables must be accepted with the reservations noted above.

THE TRADE AND SHIPPING OF BURMA 803

VALUE OF MERCHANDISE IMPORTED INTO BURMA FROM FOREIGN COUNTRIES, 1886-1905.

(In Rupees.)

Year ending March 31.	1886.	1895.	1900.	1905.
United Kingdom	25,158,684	22,506,951	29,856,108	51,842,832
Austria-Hungary	—	215,910	389,736	1,513,547
Belgium	—	685,288	1,455,482	3,149,932
France	63,077	439,339	997,169	1,929,658
Germany	548,215	1,233,352	2,936,556	5,083,291
Holland	—	1,054,212	1,166,936	3,104,849
United States	—	572,611	1,518,073	3,639,307
China	3,235	73,265	968,322	2,412,356
Japan	—	16,430	1,348,014	2,450,047
Straits Settlements	7,009,474	7,530,453	7,334,809	11,643,419
Other Countries	1,415,469	365,702	736,284	2,324,477
Total	34,198,154	34,693,513	48,697,999	89,693,715

Full details for each country for the year 1886 and for each year from 1895 to 1905 are given in Table III., Appendix S. The increase of the import trade with each country during the past ten years is shown in the following table:—

INCREASE IN THE VALUE OF IMPORTS INTO BURMA FROM THE PRINCIPAL FOREIGN COUNTRIES, 1896-1905.

	Average annual value of Imports. 1896-1900. Rupees.	Average annual value of Imports. 1901-05. Rupees.	Rate of Increase. 1896-1900 to 1901-05.
United Kingdom	31,906,858	42,426,755	32%
Austria-Hungary	431,594	1,006,160	133%
Belgium	1,205,209	2,509,383	108%
France	940,939	1,655,265	75%
Germany	2,875,988	4,356,395	51%
Holland	1,155,201	2,367,333	104%
United States	1,209,027	2,538,770	93%
China	617,075	1,395,895	126%
Japan	815,240	3,256,846	299%
Straits Settlements	8,458,256	9,801,109	15%

It will be observed that the direct import trade into Burma from the United Kingdom has increased at a much slower rate than the import trade with the other principal countries, and

this notwithstanding the fact that England continues to ship to Burma a great quantity of merchandise of foreign origin.

The most notable fact, however, disclosed by the above table is the great increase in the direct import trade from Japan, a fact the more remarkable since the figures for the five-year period 1901-05 were seriously affected by the Russo-Japanese War. How great this effect was may be measured by the fact that the imports from Japan fell in value from Rs. 4,975,480 in 1904 to Rs. 2,450,047 in 1905.

The increase of the direct import trade with China is also significant; and this increase, taken with the increase of direct Japanese imports, accounts for the comparatively slow rate of increase shown by the Straits Settlements, through which formerly the greater part of the Chinese and Japanese imports passed on their way to Burma. In fact, the average value of the imports from the Straits Settlements for the period 1901-05 was less by a million rupees than the average for the period 1891-95.

The classification of the imports of Burma according to character of the merchandise imported is not subject to those

Value of Imports of
Principal Articles.

faults of registration which detract from the usefulness of the statistics relating to the countries of origin, and the following paragraphs represent substantially the character of the import trade of Burma from foreign countries direct. It is true that a comparatively small amount of foreign merchandise is imported into Burma in the coasting trade in the form of merchandise trans-shipped at one of the ports of India and forwarded thence to Burma. These imports of foreign merchandise in the coasting trade are dealt with in the section of this chapter relating to the coasting trade. There is a further import of foreign merchandise on Government account; and this trade is dealt with in the section of this chapter relating to Government imports.

In the official statistics published by the Government of Burma the primary classification of imports according to the character of the merchandise is into seven classes; and the following summary of Table IV., Appendix S, serves to show the general character of the import trade in the period 1896-1905.

THE TRADE AND SHIPPING OF BURMA 805

VALUE, BY CLASSES, OF MERCHANDISE IMPORTED INTO BURMA IN
THE FOREIGN TRADE, 1896-1905.

(In Rupees.)

Class of Merchandise Imported.	1896.	1901.	1905.
1. Animals, living	3,844	19,970	104,770
2. Articles of Food and Drink	9,156,353	12,902,863	15,498,950
3. Metals and Manufactures of Metals	5,206,637	10,131,629	17,470,360
4. Chemicals, Drugs, Narcotics	849,192	1,152,911	1,936,112
5. Oils	969,971	923,469	1,940,965
6. Raw Materials and Unmanufactured Articles	3,284,780	2,933,323	3,236,453
7. Articles Manufactured and partly Manufactured	27,674,286	40,623,668	48,906,165
Total value of Imports of Merchandise in the Foreign Trade	47,145,063	68,687,833	89,093,715

From the foregoing table it is seen that the import of Metals and Manufactures of Metals has increased in value during the ten years 1896-1905 by 235%; the import of Chemicals, Drugs, and Narcotics, by 128%; the import of Oils by 100%; the import of Articles Manufactured and partly Manufactured by 76%; the import of Articles of Food and Drink by 69%; whilst the import of Raw Material and Unmanufactured Articles has remained stationary.

The following table shows the relative proportion to the total value of foreign imports of each class of foreign imports:—

PROPORTION PER CENT. OF EACH CLASS OF FOREIGN MERCHANDISE
IMPORTED INTO BURMA IN THE FOREIGN TRADE TO THE TOTAL
VALUE OF SUCH IMPORTS, 1896-1905.

Year ending March 31.	1896.	1901.	1905.
1. Animals, living	0.0	0.0	0.1
2. Articles of Food and Drink	19.4	18.7	17.3
3. Metals and Manufactures of Metals	11.0	14.7	19.6
4. Chemicals, Drugs, Narcotics	1.8	1.6	2.1
5. Oils	2.0	1.3	2.1
6. Raw Materials and Unmanufactured Articles	6.9	4.2	3.6
7. Articles Manufactured and partly Manufactured	58.7	59.1	54.9
Forward on all items . . . . .	.2	.4	.3
Total	100.0	100.0	100.0

No useful purpose would be served by making any further analysis on the basis of the above broad classifications. In order to gain a closer view of the character of the foreign imports of Burma the following abstract of Table IV., Appendix S, is made, in which each article of merchandise imported into Burma in the foreign trade the total value of which had reached Rs. 750,000 in 1905 is included. The value of the articles included in the following table represents 84.6% of the total value of merchandise imported into Burma in the foreign trade in the year 1905, the remaining 15.4% being made up of a large number of articles no one of which reached a value of Rs. 750,000 in 1905.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED
INTO BURMA IN THE FOREIGN TRADE, 1896-1902.

(IN RUPEES.)

Year ending March 31.	1896.	1902.	1905.
Ale, Beer, Porter	1,085,241	1,244,606	1,392,003
Spirits	1,215,755	1,386,538	1,524,021
Provisions	3,375,669	4,523,594	5,146,194
Salt	1,378,668	1,042,530	980,922
Sugar	868,398	3,200,242	2,848,910
Hardware and Cutlery	1,277,336	2,353,682	2,000,620
Metals	2,854,573	5,709,950	5,874,654
Machinery	1,044,245	2,018,609	2,753,699
Chemicals	342,839	485,950	621,602
Tobacco	245,401	370,670	354,415
Kerosene Oil	900,710	822,273	1,553,945
Raw Silk	2,165,394	1,501,920	1,497,637
Silk Piece-goods	4,702,481	5,523,886	2,749,902
Cotton Twist and Yarn	4,733,664	4,324,566	2,832,280
Cotton Piece-goods	10,421,954	18,095,066	13,410,620
Manufactures of Wool	1,110,946	3,296,892	1,796,059
Apparel	1,334,440	2,354,318	1,963,556
Boots and Shoes	185,590	390,599	494,779
Earthenware and Porcelain	583,395	426,914	579,207
Matches	546,281	770,842	871,121
Umbrellas and Sunshades	607,307	977,393	737,601

THE TRADE AND SHIPPING OF BURMA 807

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED
INTO BURMA IN THE FOREIGN TRADE, 1903-1905 (Continued).

(IN RUPEES.)

Year ending March 31.	1903.	1904.	1905.
Ale, Beer, Porter	1,259,766	1,798,231	1,689,661
Spirits	1,393,201	1,675,314	1,721,196
Provisions	5,183,252	5,562,112	5,867,606
Salt	919,967	868,730	1,000,499
Sugar	2,418,374	3,333,912	3,517,162
Hardware and Cutlery	2,374,281	3,339,576	3,320,779
Metals	5,727,389	10,707,647	10,102,436
Machinery	2,594,404	3,391,538	3,826,666
Chemicals	524,708	808,291	728,460
Tobacco	427,039	715,525	840,758
Kerosene Oil	641,493	1,281,449	1,827,456
Raw Silk	941,126	929,522	1,388,375
Silk Piece-goods	3,603,293	5,381,442	4,287,810
Cotton Twist and Yarn	3,893,886	4,521,555	3,162,606
Cotton Piece-goods	13,596,107	15,861,246	21,293,083
Manufactures of Wool	1,416,634	3,214,448	4,740,709
Apparel	1,828,191	2,691,424	2,613,014
Boots and Shoes	395,825	762,980	774,661
Earthenware and Porcelain	624,816	799,298	783,085
Matches	948,919	1,203,536	971,832
Umbrellas and Sunshades	495,456	923,038	986,236

It will be seen from the foregoing table that of the twenty-one items of merchandise enumerated four only—Salt, Raw Silk, Silk Piece-goods, and Cotton Twist and Yarn—show a decrease in 1905 as compared with 1896. The rate of increase in the value of the remaining items is shown in the following table:—

RATE OF INCREASE IN THE VALUE OF IMPORTS IN THE FOREIGN
TRADE IN THE DECADE 1896-1905.

Class of Merchandise.	Increase 1896-1905.	Class of Merchandise.	Increase, 1896-1905.
Manufactures of Wool	327%	Kerosene Oil	103%
Boots and Shoes	317	Matches	77
Sugar	305	Provisions	73
Machinery	266	Apparel	70
Metals	253	Umbrellas	62
Tobacco	242	Ale, Beer, Porter	55
Hardware	160	Spirits	41
Chemicals	112	Earthenware	34
Cotton Piece-goods	104	Of total imports	88

Further details of the various articles of merchandise imported into Burma in the foreign trade are given in Appendix S.

THE FOREIGN EXPORT TRADE.

The official statistics of the value of exports from Burma are made out in such a manner as to render them almost useless for

the purpose of making any comparison of the value of exports to the different foreign countries. Thus

until 1904 exports to Port Said "for orders" were registered as exports to Egypt, although almost the whole of the exports were in fact intended for European countries. How great the change which was affected by the registration of the true destination of these exports *via* Port Said may be seen from the fact that whereas the exports to Egypt in 1903 were valued at Rs. 55,671,748 and those to Germany at Rs. 916,929 the figures for 1904 give Egypt only Rs. 2,922,815 and Germany Rs. 17,482,810. In 1905 the discrepancy is greater still, Egypt showing Rs. 1,978,269 and Germany Rs. 19,367,874. The figures in the following table are the best which are available, but it must be noted that the greater part of the exports from Burma to the United States and Canada do not appear opposite those countries, as they are not exported directly to those countries.

VALUE OF MERCHANDISE EXPORTED FROM BURMA TO FOREIGN COUNTRIES, 1896-1905.

(In Rupees.)

Year ending March 31.	1896.	1895.	1905.	1906.
United Kingdom	28,630,204	21,183,488	21,381,634	24,186,017
Austria-Hungary	—	244,837	574,717	13,601,500
Belgium	—	15,391	6,000	2,911,228
France	—	274,958	69,979	2,338,843
Germany	125,700	890,939	703,104	19,367,874
Holland	—	391,397	80,680	11,252,461
Egypt	—	36,462,587	36,912,664	1,978,269
South America	1,408,599	11,465,723	5,384,015	5,044,662
United States	—	180,122	97,795	96,318
China	456,450	22,287	459,760	3,789,719
Japan	—	973,032	310,738	36,747,896
Straits Settlements	14,754,040	20,418,654	25,733,790	24,567,629
Other Countries	22,428,697	5,682,422	8,648,371	16,323,184
Total	67,803,690	98,175,837	100,362,647	162,825,909

THE TRADE AND SHIPPING OF BURMA 809

Full details for each country for the year 1886 and for each year from 1895-1905 are given in Table V., Appendix S. No useful purpose would be served by making any analysis of the growth of exports to each foreign country on the basis of the foregoing figures, since the figures up to 1901 credit to Egypt the greater part of the export to European countries other than the United Kingdom, as explained above.

The figures for China and Japan, however, represent substantially the true export to those countries, and they deserve some notice. Here, as in the case of imports, a great increase in the direct trade is to be observed. The exports to China rose in value from Rs. 459,760 to Rs. 3,789,719 in the five years 1901-05; and the value of the exports to Japan increased in the same period from Rs. 310,738 to Rs. 36,747,894,—an increase of more than one hundred-fold. This enormous increase was due in great part to purchases of rice in view of the war with Russia.

The items of exports from Burma in the foreign trade present, naturally, no such variety as the items of import. It will be seen from the following tables that Rice and Teak make up more than 89 per cent. of the total value of exports in the foreign trade, and that no other single item represented in 1905 as much as 4 per cent. of the total value of exports in the foreign trade. At present it is only necessary to present a brief analysis of the foreign export trade as a whole. The following table is an abstract of Table VI., Appendix S:—

VALUE OF PRINCIPAL ARTICLES OF MERCHANDISE EXPORTED FROM BURMA IN THE FOREIGN TRADE, 1886-1905.

(In Rupees.)

Year ending March 31.	1886.	1896.	1905.
Rice	55,238,058	87,439,956	135,939,970
Rice Bran	804,693	2,089,257	4,331,295
Teak	5,186,845	6,468,252	5,809,811
Hides and Skins, Raw	1,526,524	1,706,322	3,263,869
Mineral Oils	—	756,829	2,805,987
Candies	—	—	944,106
Caoutchouc, Raw	35,052	722,480	412,991
Jadestone	500,050	540,150	624,050
Cutch	1,691,388	3,352,484	931,796
Other articles	2,821,080	2,599,576	7,765,294
Total	67,803,690	105,681,306	162,828,909

The rate of increase or decrease in the value of the principal articles of export in the foreign trade in the decade 1896-1905 is shown in the following table. The most notable increase is in mineral oils. This item is made up almost entirely of locally produced kerosene and paraffin wax, the export of the former having increased from a value of Rs. 142,259 in 1896 to Rs. 1,848,171 in 1905.

RATE OF INCREASE OR DECREASE IN THE VALUE OF THE PRINCIPAL ARTICLES OF EXPORTS FROM BURMA IN THE FOREIGN TRADE IN THE DECADE 1896-1905.

Article.	Increase or decrease, 1896-1905.	Article.	Increase or decrease, 1896-1905.	
Rice	+ 55%	Candles	*	* The export of locally manufactured candles is a new trade which commenced in 1901.
Rice Bran	+ 107%	Caoutchouc	- 42%	
Teak	- 10%	Jadestone	+ 14%	
Hides, Skins	+ 91%	Catch	- 260%	
Mineral Oils	+ 271%	Other exports	+ 198%	

The relative importance of the various articles of export in the foreign trade during the past twenty years is shown in the following table:—

PROPORTION PER CENT. OF THE VALUE OF EACH PRINCIPAL ARTICLE OF EXPORT FROM BURMA IN THE FOREIGN TRADE TO THE TOTAL VALUE OF SUCH EXPORTS, 1896-1905.

Article.	Proportion per cent. 1896.	Proportion per cent. 1900.	Proportion per cent. 1905.
Rice	81.46	82.73	83.48
Rice Bran	1.17	1.97	2.66
Teak	7.64	6.12	3.37
Hides and Skins, Raw	2.25	1.61	2.00
Mineral Oils . . . . .	.00	.71	1.72
Candles . . . . .	.00	.00	.57
Caoutchouc, Raw . . . . .	.05	.68	.25
Jadestone . . . . .	.73	.51	.38
Catch	2.49	3.17	.57
Other articles	4.16	2.45	4.76
Forward on all items . . . . .	.05	.05	.04
	100.00	100.00	100.00

From the foregoing table it is seen that Rice and its by-product Rice Bran have increased their relative importance in the foreign export trade from 82.63% in 1886 to 86.14% in 1905, whilst Teak, though still retaining the second place, has fallen from 7.64% of the total to 3.57% in the same period.

THE COASTING IMPORT TRADE.

The term "Coasting Trade" as used in the official statistics of the Government of Burma requires a word of explanation. The term is used to include not only the trade between ports in the Province of Burma, but, since Burma is politically part of India, also trade between ports in Burma and all ports in India proper; that is, with ports in British India, in the Native States of India, and in parts of India under foreign rule other than British.

From the standpoint of the statistician this use of the term "Coasting Trade" is confusing, since it brings under one heading three distinct classes of trade,—the inter-portal trade of Burma, the trade of Burma with British India, and the trade of Burma with foreign dependencies in India.

The effect of this classification upon the trade statistics of Burma may be briefly stated. The volume entitled *Annual*

Meaning of the Term
"Coasting Trade." *Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports* is divided into

two parts, Part I. Foreign Trade, and Part II. Coasting Trade. Throughout the tables in Part II. a distinction is made between imports and exports of the produce and manufactures of India and the imports and exports of foreign merchandise. As these tables are all constructed on the same plan, it is sufficient for the present purpose if I deal with the tables relating to the imports into Burma of articles of Indian produce and manufacture, for any remarks made on these particular tables would apply *mutatis mutandis* to the other tables.

Table 3 of Part II. of the *Annual Statement* is headed "Quantity and Value of the Principal and Other Articles of Indian Produce and Manufactures imported from Indian Ports into the Province of Burma, in each official year, from 1900-1901 to 1904-05." This is a summary table giving simply the totals under each item and making no distinction as to what part of India the merchandise came from. Table 7 of Part II. is headed "Quantity and Value of the Principal and Other Articles of Indian Produce and Manufacture imported Coast-

wise from Indian Ports into the Province of Burma in the official year 1904-05. This is a detailed table subdividing the total value of each article imported into the values from each part of India. It will be noted that the phraseology of these two headings differs in this respect, that whereas the former says "imported from Indian Ports," the latter says "imported coastwise from Indian Ports." At first sight one is led to suppose that this difference in phraseology has some special significance, for instance that the first table refers to imports from ports in India proper, exclusive of Burma, and that the latter, by the indication of the added word "coastwise," refers to imports from India proper and the imports from one port to another in Burma.

Reference to the totals of these two tables shows, however, that the two tables cover the same ground, and that they both include imports from British India proper, from Native India, from Foreign India, and from ports in Burma. It is difficult under these circumstances to understand the object of the difference in phraseology referred to. It may be noted here that the *Annual Statement* contains no explanations of any kind, but consists simply of a mass of tables.

The import tables No. 3 and No. 7 state that there was imported into the Province of Burma from Indian ports merchandise of Indian Produce and Manufacture in the official year 1904-05 to the value of Rs. 69,222,013. But as a matter of fact it is seen that of this total sum shown as the value of imports into the Province Rs. 7,266,840 represents the value of goods imported into ports within the Province from other ports within the Province. It is clear, therefore, that the true value of imports of Indian produce and manufactures into the Province of Burma—that is, the value of such imports into the Province from outside the Province—in the year 1904-05 was not Rs. 69,222,013, but that sum *minus* Rs. 7,226,840; that is to say, Rs. 61,955,173, or about 10.5 per cent. less than the figures as given in the official report.

The difference between the apparent and the true imports in the coasting trade is even greater if we include in our calculation the import of foreign merchandise in the coasting trade. The total value of all merchandise imported into the Province of Burma in the coasting trade in 1904-05 is stated in the *Annual Statement* as Rs. 81,527,081, but of this sum Rs. 14,820,832 represent inter-portal imports within the Province. The true value of all merchandise imported in the coasting trade was, therefore, Rs. 66,706,249, or about 18.1 per cent. less than the figures as given in the official report.

THE TRADE AND SHIPPING OF BURMA 813

The following table is a summary of Table VIII., Appendix S, in which the value of merchandise, Indian and Foreign, into Burma in the coasting trade is given for each year from 1886 to 1905. In this summary table I have separated the inter-portal trade of Burma from the trade with India, so that the figures show at a glance the value of merchandise actually imported into Burma from outside the Province as well as the value of the inter-portal trade within the Province. It will be seen from the following table that both as regards the import of Indian produce and manufactures and the import of foreign merchandise Bengal is by far the most important source of supply in the coasting import trade of Burma from outside the Province, Madras coming next, followed by Bombay, Indian Ports not British, and Sind, in the order named.

VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE, 1886-1905.

(IN RUPEES.)

Country of Origin.	Character of Merchandise.	1886.	1896.	1905.
FROM BENGAL	Indian	13,306,526	20,034,456	38,169,504
	Foreign	4,639,504	4,837,643	3,558,142
	Total	17,946,030	25,772,099	41,667,646
FROM MADRAS	Indian	5,645,293	10,591,546	15,319,172
	Foreign	207,851	183,519	176,540
	Total	5,853,144	10,775,066	15,495,712
FROM BOMBAY	Indian	779,279	4,472,131	7,829,103
	Foreign	1,073,826	2,440,217	1,907,147
	Total	1,853,105	6,912,348	8,836,250
FROM INDIAN PORTS NOT BRITISH	Indian	516,446	261,208	525,969
	Foreign	3,873	4,148	1,972
	Total	520,319	265,356	527,941
FROM SIND	Indian	—	20,670	171,425
	Foreign	—	1,300	7,275
	Total	—	22,170	178,700
TOTAL FROM OUTSIDE THE PROVINCE	Indian	20,247,544	36,280,011	61,955,173
	Foreign	5,925,054	7,467,018	4,751,076
	Total	26,172,598	43,747,029	66,706,249

VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE, 1886-1905 (Continued).

(In Rupees.)

Country of Origin.	Character of Merchandise.	1886.	1896.	1905.
INTER-PORTAL TRADE WITHIN THE PROVINCE	Indian	2,708,856	5,478,503	7,208,540
	Foreign	4,081,930	5,530,376	7,553,902
	Total	6,790,786	11,308,879	14,820,532
GRAND TOTAL COASTING TRADE	Indian	22,950,400	41,758,514	60,222,013
	Foreign	10,000,094	13,207,394	12,305,068
	Total	32,950,494	55,055,908	81,527,081

The foregoing table calls for little comment. It shows that during the past twenty years there has been a steady increase in the total coasting trade of Burma, and that the increase has been shared by each country of origin with the single exception of "Indian Ports not British," the trade with which is very small in value, and has remained almost stationary in the period under review, except during the years 1889-1894 when it averaged about Rs. 1,500,000 annually. During the past ten years, however, the imports from Indian Ports not British have shown signs of revival, though still far below the average for the years 1889-94.

The following table shows the increase of the coasting import trade during the past ten years, arranged according to the countries of origin. Full details for the twenty years 1886-1905 are given in Table VIII., Appendix S.

INCREASE IN THE VALUE OF IMPORTS INTO BURMA IN THE COASTING TRADE, 1896-1905.

Country of Origin.	Average annual value of Imports, 1886-1905. (Rupees.)	Average annual value of Imports, 1896-1905. (Rupees.)	Rate of increase, 1896-1905 to 1886-95.
Bengal	28,655,491	37,124,345	30%
Madras	11,341,064	13,801,126	21%
Bombay	5,890,332	7,585,547	28%
Indian Ports not British	211,844	434,827	105%
Sind	112,362	190,834	69%
Total from outside Province	45,811,293	59,156,400	29%
Inter-portal Trade within Province	11,396,331	13,739,695	20%
Total Coasting Trade	57,207,626	72,896,095	27%

It is seen from the foregoing table that, leaving out of consideration the comparatively insignificant import trade from Sind and from Indian Ports not British, on the average figures for the past ten years the greatest increase is shown in the Bengal trade, the smallest in the inter-portal trade within the Province. Reference to Table VIII., Appendix S, shows that the import coasting trade is very free from violent fluctuation, and that it has pursued, in all except its two smallest branches, a steady course of growth during the past twenty years.

The following analysis of the coasting import trade of Burma, according to the value of the principal articles imported, during the five years 1901-05 is based upon the Value of Imports of Principal Articles. figures given in the *Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports*. Prior to 1901 the only volumes which I have been able to consult in regard to the Coasting Trade of Burma are the annual volumes of the *Report on the Trade and Navigation of Burma*, and these do not furnish sufficient details to permit of any close analysis of the coasting import trade on the basis of the value of the principal articles imported. Before proceeding to a discussion of the figures for 1901-05, attention must be directed to the fact that, as the total figures under each article in the coasting import trade, as given in the *Annual Statement*, include the value of imports passing between ports within the Province, they do not represent the value of the actual imports into the Province from outside, but the value of such imports *plus* the value of the inter-portal imports within the Province. For the present purpose I have deemed it advisable to separate these two sets of figures, and to give here the value of the actual imports in the coasting trade into the Province from outside. Owing to the form in which the official statistics are compiled, the task of ascertaining the value of the imports of each principal article from outside the Province has involved a great deal of labour; but it is clear that, unless the value of the inter-portal imports within the Province are separated from the value of the imports from outside the Province, no accurate view can be obtained of the main fact which import statistics are supposed to furnish; namely, the dependence of the territory concerned upon outside sources of supply for its commercial needs. The figures in this section refer, therefore, to the imports in the coasting trade from outside the Province only; that is to say, to imports from India proper, British, Native, and Foreign.

The following table is an abstract of Table IX., Appendix S.

VALUE OF THE PRINCIPAL ARTICLES OF INDIAN PRODUCE AND MANUFACTURE AND OF FOREIGN MERCHANDISE IMPORTED INTO BURMA FROM INDIAN PORTS OUTSIDE THE PROVINCE DURING THE YEARS ENDING 31 MARCH, 1901, AND 1905.

(IN RUPEES.)

Articles.	Character of Merchandise.	1901.	1905.
GUNNY BAGS	Indian	7,085,311	8,884,987
	Foreign	—	—
	Total	7,085,311	8,884,987
COTTON TWIST AND YARN	Indian	3,115,148	4,007,824
	Foreign	568,838	392,230
	Total	3,683,986	4,400,054
COTTON MANUFACTURES	Indian	2,888,477	4,065,981
	Foreign	1,425,806	2,006,186
	Total	4,314,283	6,072,167
TOBACCO	Indian	5,650,401	5,811,584
	Foreign	65,487	27,388
	Total	5,715,888	5,838,972
VEGETABLE OILS	Indian	4,118,580	5,422,366
	Foreign	—	—
	Total	4,118,580	5,422,366
SPICES	Indian	5,730,998	5,796,547
	Foreign	79,873	—
	Total	5,810,871	5,796,547
PROVINGONS	Indian	5,481,906	6,914,810
	Foreign	68,776	84,800
	Total	5,550,682	7,001,610
COAL, COKE, PATENT FUEL	Indian	2,409,555	3,914,304
	Foreign	101,328	—
	Total	2,511,313	3,914,304
SEEDS	Indian	1,525,006	2,554,979
	Foreign	—	—
	Total	1,525,006	2,554,979
SILK MANUFACTURES	Indian	1,208,774	572,719
	Foreign	119,663	44,700
	Total	1,328,437	617,419

THE TRADE AND SHIPPING OF BURMA 817

VALUE OF THE PRINCIPAL ARTICLES OF INDIAN PRODUCE AND MANUFACTURE AND OF FOREIGN MERCHANDISE IMPORTED INTO BURMA FROM INDIAN PORTS OUTSIDE THE PROVINCE DURING THE YEARS ENDING 31 MARCH, 1901, AND 1905 (Continued).

(In Rupees.)

Articles.	Character of Merchandise.	1901.	1905.
WHEAT FLOUR	Indian	1,678,763	2,421,665
	Foreign	—	—
	Total	1,678,763	2,421,665
FRESH VEGETABLES	Indian	1,058,914	1,270,124
	Foreign	—	—
	Total	1,058,914	1,270,124
CORDAGE, ROPE, TWINE	Indian	846,566	1,142,960
	Foreign	7,211	2,322
	Total	847,767	1,145,282
PYLAE	Indian	795,010	1,187,159
	Foreign	—	—
	Total	795,010	1,187,159
SUGAR	Indian	389,717	759,174
	Foreign	2,730	15,945
	Total	392,447	775,119
METALS	Indian	683,653	894,334
	Foreign	270,100	345,811
	Total	953,753	1,240,145
HARDWARE AND CUTLERY	Indian	126,591	366,588
	Foreign	266,925	296,311
	Total	393,516	672,899
APPAREL	Indian	274,305	297,313
	Foreign	229,182	180,561
	Total	503,487	477,874
BOOTS AND SHOES	Indian	290,670	247,406
	Foreign	40,807	16,181
	Total	331,477	263,587
UMBRELLAS AND SUNSHADES	Indian	98,789	248,111
	Foreign	40,892	86,778
	Total	145,681	334,889

It is seen from the foregoing table that by far the most important article imported into Burma in the coasting trade is

gunny bags. These are used for packing rice. They are made of jute, and practically the whole import is from Bengal.

The item provisions, which comes next in rank, includes butter, cheese, dried fruits and vegetables, and other articles of food; but the principal articles included under this head are dried fish, salted and unsalted, and ghi, which is boiled butter, the universal medium of cookery amongst the natives.

The import of cotton manufactures is made up chiefly of the two items grey unbleached piece-goods and coloured, printed, or dyed piece-goods. It will be noted that about one-third of the value of the import of cotton manufactures represents foreign goods imported through Indian ports, and that about two-thirds represents goods manufactured in India.

Almost the whole of the item tobacco is made up of unmanufactured tobacco imported from Bengal and Madras.

Under the head spices the most important item, representing more than 90 per cent. of the total value, is betel-nuts. The betel-nut is the fruit of the areca palm, *Areca catechu*, and is used by the Burmans as a masticatory.

Under vegetable oils the three principal items are earth-nut oil, til, or jinjili, and cocoanut oil. The first is a product of the earth-nut, sometimes called ground-nut, monkey-nut, or peanut, and is used as a lamp oil and for cooking and medicinal purposes. Til or jinjili oil, better known as gingelly oil or oil of sesame, is the product of *Sesamum orientale*, and it is used as an article of food and for lighting and lubricating purposes. The uses of cocoanut oil are manifold, but it is chiefly used for cooking purposes.

The only article imported in the coasting trade which shows a noticeable decline in value in recent years is manufactures of silk. This decline has been steady during the past five years, and it is seen that the value of imports of silk manufactures has fallen in 1905 to less than half what it was in 1901.

THE COASTING EXPORT TRADE.

In the following analysis of the coasting export trade of Burma I have followed the same method as that adopted in the case of the coasting import trade; that is to say, I have separated the inter-portal trade within the Province from the actual export trade to ports in India outside the Province. The remarks on pp. 811, 812, in regard to the coasting import trade apply, *mutatis mutandis*, to the coast-

THE TRADE AND SHIPPING OF BURMA 819

ing export trade. The following table is a summary of Table X., Appendix S, in which the value of merchandise exported from Burma in the coasting trade is given for each year from 1886 to 1905. In this table I have separated the inter-portal trade within the Province from the trade with India, so that the figures show the value of merchandise exported from Burma to ports in India proper as well as the value of the inter-portal exports.

VALUE OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE, 1886-1905.

(IN RUPEES.)

Country of Destination.	Character of Merchandise.	1886.	1896.	1905.
To BENGAL	Indian	3,929,714	6,924,631	31,388,576
	Foreign	270,557	881,348	1,477,828
	Total	4,200,271	7,805,979	32,866,404
To BOMBAY	Indian	7,353,223	9,015,436	16,835,787
	Foreign	30,606	34,904	77,911
	Total	7,383,829	9,050,340	16,913,698
To MADRAS	Indian	4,569,783	7,385,921	11,789,911
	Foreign	24,146	63,684	222,082
	Total	4,593,947	7,449,605	12,011,993
To INDIAN PORTS NOT BRITISH	Indian	244,246	539,675	745,450
	Foreign	400	72	45
	Total	244,646	539,747	745,495
To SINGAPORE	Indian	137,500	386,930	178,097
	Foreign	2,825	2,000	7,750
	Total	140,325	389,930	185,847
TOTAL TO PORTS OUTSIDE THE PROVINCE	Indian	16,234,466	24,252,593	60,937,821
	Foreign	328,552	982,608	1,785,616
	Total	16,563,018	25,235,201	62,723,437
INTER-PORTAL TRADE WITHIN THE PROVINCE	Indian	2,259,141	4,501,849	6,450,369
	Foreign	3,913,257	5,728,076	7,466,399
	Total	6,163,398	10,229,925	13,916,768
GRAND TOTAL COASTING TRADE	Indian	18,484,607	28,754,442	67,388,190
	Foreign	4,241,809	6,710,684	9,252,015
	Total	22,726,416	35,465,126	76,640,205

From the foregoing table it is seen that there has been a great increase during the past twenty years in the coasting export trade of Burma, and that this increase has been shared in a greater or less degree by each country of destination.

No useful purpose would be served by making any close analysis of the rates of increase, under each country of destination, in the coasting export trade of Burma, since the values have been subject to violent fluctuations from year to year. These fluctuations have been due chiefly to the existence of famine in one or another part of India and the consequent export to the famine area of large quantities of Burmese rice. The fluctuations may be traced in Table X., Appendix S. It suffices for the present purpose to give one or two instances. The exports from Burma to Bengal in 1896 reached a value of Rs. 7,805,979, in 1897 the value rose to Rs. 20,002,931, and in the following year to Rs. 32,480,857, and in 1899 fell to Rs. 11,413,126. The explanation of these rapid fluctuations is to be found in the great Indian famine of 1896-97. The exports from Burma to Bombay in 1895 reached a value of Rs. 13,081,895, in 1900 the value rose to Rs. 47,050,531, and in the following year to Rs. 57,436,990, and in 1904 had fallen to Rs. 11,061,296. The cause of these fluctuations was the Indian famine of 1899-1900.

Confining ourselves to the value of the total exports from Burma in the coasting trade to ports outside the Province, it is seen that the progressive increase during the past twenty years has been from Rs. 16,563,018 in 1886 to Rs. 25,235,201 in 1896, to Rs. 62,723,437 in 1905, an increase of 52 per cent. between 1886 and 1896, and of 140 per cent. between 1896 and 1905.

The following table, which is an abstract of Table XI., Appendix S, shows the value of the principal articles of export from

Value of Exports of
Principal Articles.

Burma in the coasting trade to ports outside the Province. The itemised articles represent about 90 per cent. of the total, the remaining 10 per cent. included under the item "All other articles" includes the whole of the export of foreign merchandise and the lesser items of Indian produce and manufacture.

THE TRADE AND SHIPPING OF BURMA 821

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE EXPORTED
FROM BURMA IN THE COASTING TRADE TO PORTS OUTSIDE
THE PROVINCE, 1901, 1905.

(IN RUPEES.)

Article of Export.	1901.	1905.
Rice	73,448,422	20,514,635
Teak	7,851,726	7,081,574
Timber other than teak	309,350	772,543
Kerosene Oil	4,068,291	23,425,567
Other Mineral Oils	869,709	2,406,772
Pulse	4,239,094	774,433
Stick Lac	179,940	1,214,862
Cutch	515,820	308,675
Block Tin	19,008	315,868
All other articles	6,937,211	5,908,688
Grand Total	98,438,571	62,723,437

It is seen from the above table that the two food items, rice and pulse, have fallen off greatly in the past five years. This is due to the absence of famine conditions in India proper since the great famine of 1899-1900.

The most notable increase is in the export of kerosene and other mineral oils, the value of which has increased steadily and continuously during the five years under review. The violent fluctuations to which the coasting export trade is liable, from causes referred to on page 820, render useless any attempt to make a close analysis of the rates of increase in the various articles of export or of the relative importance of each article. It is sufficient to say that normally the articles of export range themselves in the following order of importance—rice, kerosene oil, teak, mineral oils other than kerosene, stick lac, pulse, timber other than teak, cutch, block tin.

IMPORT AND EXPORT OF GOVERNMENT STORES IN THE FOREIGN AND COASTING TRADES.

The value of the imports and exports of Government stores in Burma is not included in the general trade statistics of the Province; and the figures which have been given thus far in the present chapter relate only to transactions in the private trade.

The following table is an abstract of Table XIV., Appendix 8. The figures are only brought down to 1903 because statistics of the imports and exports of Government stores in the coasting trade are omitted from the *Report on the Maritime Trade of Burma* and from the *Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports* for the years 1904 and 1905.

VALUE OF THE IMPORTS AND EXPORTS OF GOVERNMENT STORES INTO AND FROM THE PROVINCE OF BURMA DURING THE YEARS ENDING 31 MARCH, 1886-1903.

(In Rupees.)

Year.	Imports.			Exports.		
	Foreign.	Coasting.	Total.	Foreign.	Coasting.	Total.
1886	492,776	1,138,563	1,541,339	14,800	405,240	420,040
1895	1,082,648	989,096	2,072,744	9,225	183,992	193,217
1900	3,632,112	1,730,104	5,362,216	5,535	417,190	422,725
1901	4,109,805	2,198,502	6,218,307	1,855	432,657	434,512
1902	3,105,968	2,193,693	5,299,661	23,949	537,809	561,758
1903	2,239,807	3,198,927	5,438,734	36,669	973,668	1,010,337

It is seen from the foregoing table that the export of Government stores is almost entirely confined to the coasting trade. This export represents chiefly the movement of Government stores from one port to another within the Province.

The import of Government stores in the foreign trade is made up largely of material for use by the Burma Government Railway, as will be seen from the following table:—

VALUE OF IMPORTS OF GOVERNMENT STORES INTO BURMA IN THE FOREIGN TRADE, 1901-05.

(In Rupees.)

Year.	Total.	Railway Plant and Rolling Stock.	Other Articles.
1901	4,109,805	3,195,163	954,642
1902	3,105,968	1,846,191	1,259,777
1903	2,239,807	1,738,655	501,152
1904	1,252,311	588,336	663,975
1905	3,358,831	2,438,546	920,285

THE TRADE AND SHIPPING OF BURMA 823

The import of Government stores in the coasting trade consists almost entirely of articles imported from India proper for use by the various departments of the Local Government, chiefly the Public Works Department.

THE IMPORT AND EXPORT OF TREASURE.

With the exception of an export of Rs. 16,500 in 1890-91 there have been no imports or exports of treasure on behalf of the Government from or to foreign countries during the past twenty-five years. The imports and exports of Government treasure in the coasting trade represent almost entirely the movement of treasure between ports within the Province for treasury purposes.

The following table which is an abstract of Tables XII. and XIII., Appendix S, shows the import and export of private treasure in the years 1896, 1901, and 1905. It will be noted that of the imports of treasure from ports outside the Province by far the greatest proportion is drawn from India; and reference to Table XIII., Appendix S, shows that the destination of the treasure exported each year varies greatly from year to year in response to the commercial requirements of the Province.

VALUE OF THE PRIVATE IMPORT AND EXPORT OF TREASURE INTO AND FROM BURMA DURING THE YEARS 1896-1905.

(In Rupees.)

Origin of Imports and Destination of Exports.	1896.		1901.		1905.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Foreign Countries . . .	1,179,647	1,000	1,227,234	454,800	2,301,903	52,290
Indian Ports outside the Province	5,267,572	152,060	6,983,739	1,970,600	5,437,692	67,534
Total outside the Province	6,447,219	153,060	8,210,973	2,425,400	7,738,995	119,824
Inter-port Transactions within the Province	528,230	475,303	647,513	628,241	1,771,627	2,079,874
Grand Total	6,975,449	628,363	8,858,486	3,053,641	9,510,622	2,199,708

THE TRANS-FRONTIER TRADE.

Until within recent years the registration of the trans-frontier trade of Burma has been so incomplete that it is impossible to make any accurate estimate of the growth of the trade on the basis of the statistics available for the past twenty years. Even at the present time a considerable trans-frontier trade escapes registration. The nature of the country along the frontiers of Burma is such that the difficulty and expense of securing complete registration of the trans-frontier trade would outweigh any advantages which might be derived from a minute statistical record of the commerce.

The annual *Report on the Trans-frontier Trade of Burma* furnishes a mass of useful and interesting details in regard to trade with the countries bordering on Burma; and from these reports the following paragraphs are compiled.

The following table, which is an abstract of Tables XV., and XVII., Appendix S, shows the direction of the trans-frontier

Value of the Trade
by Countries.

trade during the years 1900 and 1905. It will be noted that, in so far as trade registration is concerned, the Shan States, though under the political control of Burma, are treated as foreign countries. The trade covered by the following table represents the goods registered at 28 stations in 1900 and at 38 stations in 1905. The stations lie along the eastern frontier of the Province, from Waingmaw in the north to Myitta in the south, a line of about eight hundred miles.

VALUE OF THE IMPORTS IN THE TRANS-FRONTIER TRADE OF
BURMA DURING THE YEARS ENDING 31 MARCH, 1900, 1905.

(In Rupees.)

Country of Origin.	Imports 1900.		Imports 1905.	
	Merchandise.	Treasure.	Merchandise.	Treasure.
Western China	1,132,836	821,854	1,313,717	1,317,199
Northern Shan States .	3,604,588	1,134,308	5,421,177	994,802
Southern Shan States .	2,884,141	1,402,518	4,292,587	1,486,194
Northern Siam	1,671,089	852,834	2,892,590	999,429
Southern Siam	303,115	219,998	726,164	32,782
Karenni	2,594,267	61,235	2,504,267	138,715
Total	12,190,176	4,492,747	17,150,602	4,988,221

THE TRADE AND SHIPPING OF BURMA 825

VALUE OF THE EXPORTS IN THE TRANS-FRONTIER TRADE OF
BURMA DURING THE YEARS ENDING 31 MARCH, 1900, 1905.

(IN RUPEES.)

Country of Destination.	Exports 1900.		Exports 1905.	
	Merchandise.	Treasure.	Merchandise.	Treasure.
Western China	2,226,352	157,626	3,677,885	411,195
Northern Shan States .	3,735,942	766,981	4,449,300	260,095
Southern Shan States .	3,643,764	700,800	4,615,037	1,062,406
Northern Siam	900,994	832,699	1,071,729	1,504,665
Southern Siam	268,678	270,794	210,362	312,260
Karenni	81,886	440,313	236,826	390,332
Total	10,857,566	3,169,213	14,261,039	3,941,553

It is seen from the foregoing table that there has been a considerable increase in the trans-frontier trade of Burma during the past few years. Part of this increase is no doubt due to a closer registration of the trade, but with allowance made for that there still remains a steady growth in the imports and exports of merchandise. By far the most important branch of the trans-frontier trade is that with the Shan States; and there is every reason to suppose that, when the Shan States are made accessible by rail, this trade will rapidly increase.

The principal articles imported into Burma in the trans-frontier trade in 1905 were teak, live animals, and pickled tea, and the

Imports and Exports of Principal Articles. principal articles exported in the trans-frontier trade were cotton twist and yarn, cotton manufactures, and fish.

The following table shows the value, under each principal head, of the imports and exports in the trans-frontier trade during the year ending March 31, 1905. The direction of the trade by countries under each head is given in Tables XVI. and XVIII., Appendix S.

(Table on next page.)

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED
AND EXPORTED IN THE TRANS-FRONTIER TRADE OF BURMA
DURING THE YEAR ENDING 31 MARCH, 1905.

(IN RUPEES.)

Imports.		Exports.	
Live Animals	3,465,744	Cotton Twist and Yarn	3,282,378
Timber	5,475,804	Cotton Manufactures	3,621,909
Pickled Tea	2,488,197	Raw Cotton	566,173
Other Tea	1,074,143	Salt	565,877
Lac	946,213	Spices	492,288
Fruit and Vegetables	473,216	Silk Manufactures	775,922
Raw Silk	456,600	Dry Fish	618,039
Silk Manufactures	419,241	Wet Salted Fish	373,292
Other articles	2,351,444	Other articles	3,371,250
Total Imports	17,150,602	Total Exports	14,202,539

Of the imports the principal source for live animals was the Southern Shan States and Northern Siam; of timber, Northern Siam and Karenni; of pickled tea and other tea, the Northern Shan States; of lac and fruit and vegetables, the Southern Shan States; and of silk, Western China.

The import of timber consisted almost entirely of teak, the figures being for teak Rs. 5,432,742 and for other kinds of timber Rs. 43,062. The import of animals consisted chiefly of cattle, the figures being for cattle Rs. 2,186,532, for horses Rs. 458,020, and for all other animals Rs. 821,192. In regard to the pickled tea which forms such an important item in the list of imports the following note from *The Burman: His Life and Notions*, by Shway Yoe (Sir George Scott), is of interest:—

"Most of the young people, however, prime themselves with the anti-soporific le'hpét, 'pickled tea,' as the English call it, and bid defiance to drowsiness. This condiment is as regular a crown to a Burmese dinner as cheese is to an English one, and with the same idea, possibly erroneous in both cases, that it promotes digestion. The greater quantity of it is prepared by the Shans and Paloungs, hill tribes on the Chinese border, and is floated down the river on small bamboo rafts to keep it moist. The Burmese mix it with salt, garlic, and assafoetida, dose it in oil, and add a few grains of millet seed. Both Burmese and English names are misleading. The leaves forming the basis are not those of the tea-tree, but of a shrub which Hooker calls the

Elæodendron orientale, while Dr. Anderson asserts it is the *E. persicum*."

Of the exports the greater part of the cotton twist and yarn goes to Western China, and of the cotton manufactures to the Shan States. The export of fish goes chiefly to the Shan States.

FREE AND DUTIABLE IMPORTS AND EXPORTS.

The only portions of the trade of Burma which are subject to customs duties are the private merchandise imported and exported in the foreign trade of the Province and the import in the coasting trade of salt, opium, and spirits. All imports and exports on account of Government are free both in the foreign and coasting trade; and with the exception of salt, opium, and spirits the private coasting trade with ports in British India is free.

The amount of duties collected on imports and exports during the past five years is given in Table II., Appendix S. In 1905 the sea-borne imports of private merchandise into Burma, in the foreign and in the coasting trade, reached a total value of Rs. 170,620,796, and of this total Rs. 77,747,264 represented merchandise liable to duty. The amount of duty collected was Rs. 6,200,286.

The sea-borne exports of private merchandise from Burma reached a total value, in the foreign and coasting trade, of Rs. 239,469,114 in 1905. Of this total Rs. 135,939,970 represented merchandise liable to duty, and there was collected on it Rs. 9,844,358. The only articles in the export trade which are liable to duty are husked rice, unhusked rice, and rice flour. The articles in the import trade which are liable to duty are enumerated in the schedules of the Indian Tariff Act. They are dealt with on page 576 of this volume.

THE SHIPPING OF BURMA.

The following table, which is an abstract of Table XXI., Appendix S, gives the number and tonnage of vessels entered and cleared in the foreign trade of Burma during the ten years ending March 31, 1905. It will be observed that the tonnage of vessels entered increased during the past ten years from 643,416 to 1,164,603, an advance of 81 per cent.

(Table on next page.)

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE FOREIGN TRADE OF BURMA, 1896-1905.

Year ending March 31.	Entered.		Clearance.	
	Number.	Tonnage.	Number.	Tonnage.
1896	491	643,416	551	790,968
1897	418	541,719	463	670,640
1898	480	590,462	465	690,728
1899	506	723,948	567	849,948
1900	507	711,038	488	738,328
1901	480	679,899	464	735,614
1902	493	757,809	465	800,846
1903	542	973,621	578	1,112,315
1904	553	995,209	585	1,134,621
1905	623	1,164,603	665	1,196,732

By reference to Table XXI., Appendix S, it will be seen that sailing vessels represent an insignificant and gradually decreasing proportion of the shipping of Burma in the foreign trade. The tonnage of sailing vessels entered decreased from 135,041 in 1896 to 27,950 in 1905. In the former year the sailing-vessel tonnage represented about one-fifth of the total tonnage entered. In the latter year the proportion had fallen to about one-fortieth.

In nationality the shipping in the foreign trade of Burma is preponderatingly British. The following table, which is an

abstract of Table XXII., Appendix S, shows the tonnage of all vessels entered in the foreign trade during the ten years ending March 31, 1905, under five heads of classification. Full details of the tonnage included under the head "Foreign" are given in Table XXII., Appendix S.

THE TRADE AND SHIPPING OF BURMA 829

NATIONALITY OF VESSELS WHICH ENTERED THE PORTS OF BURMA
IN THE FOREIGN TRADE, 1896-1905.

Year ending March 31.	British.	British Indian.	Foreign.	Foreign Indian.	Native Craft.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1896 . . .	542,745	1,859	96,051	130	2,631	643,416
1897 . . .	462,188	1,265	74,785	904	2,577	541,719
1898 . . .	497,314	4,347	95,076	—	2,725	599,462
1899 . . .	614,583	1,022	105,345	640	2,358	723,948
1900 . . .	590,615	3,756	106,496	522	3,649	711,038
1901 . . .	568,820	5,734	100,510	261	4,574	679,899
1902 . . .	622,696	5,244	124,961	438	4,470	757,809
1903 . . .	777,911	2,561	188,689	—	4,460	973,621
1904 . . .	789,704	2,838	189,511	—	4,156	995,209
1905 . . .	978,880	4,982	175,197	—	5,544	1,164,603

By reference to Table XXII., Appendix S, it is seen that of the shipping other than British the greater part is under the German flag, Austria and Norway being the only other countries represented by an annual tonnage exceeding four thousand.

The following table, which is an abstract of Table XXIV., Appendix S, gives the number and tonnage of vessels entered and cleared in the coasting trade of Burma

The Coasting Trade during the ten years ending March 31, 1905.

It will be observed that the tonnage increased during the ten years under review from 1,327,975 to 2,104,912, an advance of about 58 per cent.

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE COASTING
TRADE OF BURMA, 1896-1905.

Year ending March 31.	ENTERED.		CLEARED.	
	Number.	Tonnage.	Number.	Tonnage.
1896	2,670	1,327,975	2,643	1,179,433
1897	2,679	1,382,290	2,690	1,256,024
1898	2,863	1,477,259	2,872	1,416,436
1899	2,891	1,406,015	2,860	1,302,471
1900	2,814	1,451,952	2,857	1,400,132
1901	2,964	1,640,907	3,014	1,601,627
1902	2,930	1,679,225	2,954	1,690,511
1903	3,194	1,763,189	3,204	1,620,454
1904	4,280	1,906,143	3,974	1,808,319
1905	3,459	2,104,912	3,345	2,034,090

By reference to Table XXIV., Appendix S, it will be seen that, although the tonnage of sailing vessels employed in the coasting trade of Burma is insignificant when compared with the tonnage of steam vessels, it shows a slight increase in recent years.

The nationality of the shipping engaged in the coasting trade of Burma is preponderatingly British. Table XXV.,

Nationality of Shipping
in the Coasting Trade.

Appendix S, gives full details under five heads of classification. It is sufficient to point out that in a total tonnage entered with cargoes in the coasting trade in 1905 of 1,844,697 tons no less than 1,727,418 tons were under the British flag, 63,083 tons being foreign and 46,106 tons being native craft.

APPENDICES

- APPENDIX M. Financial and Postal Statistics, and Tables of Local Weights and Measures.
- APPENDIX N. Details of the Opium Regulations.
- APPENDIX O. Details of Land Revenue Settlement in Lower Burma.
- APPENDIX P. Statistics of Land Revenue, of Land Holdings, and of Agricultural Loans.
- APPENDIX Q. Forestry Statistics.
- APPENDIX R. Medical and Vital Statistics.
- APPENDIX S. Statistics of the Trade and Shipping of Burma.
- APPENDIX T. Contribution to a Bibliography of Burma.
- APPENDIX U. Glossary of Indian and Burmese Words Used in These Volumes.

APPENDIX M.

FINANCIAL AND POSTAL STATISTICS, AND TABLES OF LOCAL WEIGHTS AND MEASURES

- Table I. General Statement of the Gross Revenue and Expenditure of Burma under the Heads Imperial, Provincial, and Incorporated Local during the Years ending 31 March, 1896-1905.
- Table II. Detailed Statement of the Gross Revenue of Burma under each Main Head during the Years ending 31 March, 1896-1905.
- Table III. Detailed Statement of the Gross Expenditure of Burma under each Main Head during the Years ending 31 March, 1896-1905.
- Table IV. Revenue and Expenditure of the Indian Post Office Department in Burma during the Years ending 31 March, 1895-1904.
- Table V. General Postal Statistics of Burma during the Years ending 31 March, 1885-1904.
- Table VI. Indian and Burmese Money, Weights, and Measures.

APPENDIX M.

FINANCIAL AND POSTAL STATISTICS, AND TABLES OF LOCAL WEIGHTS AND MEASURES

TABLE I.

GENERAL STATEMENT OF THE GROSS REVENUE AND EXPENDITURE OF BURMA, UNDER THE HEADS IMPERIAL, PROVINCIAL, AND INCORPORATED LOCAL DURING THE YEARS ENDING 31 MARCH, 1896-1905.

(IN RUPEES.)

Year ending 31 March.	REVENUE.			
	Imperial.	Provincial.	Local.	Total.
1896	35,320,000	22,074,570	1,828,220	59,222,790
1897	35,623,430	21,519,970	1,892,840	58,936,240
1898	30,276,250	31,383,220	2,023,470	63,682,940
1899	33,880,880	33,803,190	2,116,330	69,800,400
1900	33,729,700	34,446,349	2,260,191	70,436,240
1901	37,247,871	36,134,492	2,377,765	75,760,128
1902	38,283,768	36,178,372	2,536,590	76,998,730
1903	47,110,415	33,643,534	2,580,131	83,334,080
1904	51,393,315	36,608,611	2,680,713	90,753,639
1905	55,628,094	38,162,409	2,771,795	96,562,298

Year ending 31 March.	EXPENDITURE.			
	Imperial.	Provincial.	Local.	Total.
1896	18,274,330	19,898,420	1,825,200	39,997,950
1897	19,009,900	21,499,710	1,790,050	42,299,660
1898	8,451,800	29,902,600	1,728,990	40,083,390
1899	8,619,700	29,984,880	1,871,220	40,475,800
1900	9,036,576	32,114,927	1,939,497	43,091,000
1901	10,228,164	34,947,542	2,042,701	47,218,407
1902	11,167,115	35,781,457	2,051,874	49,000,446
1903	11,863,159	37,329,721	2,153,591	51,346,381
1904	13,404,223	39,680,176	2,194,060	55,278,459
1905	14,155,664	40,163,201	2,341,182	56,660,047

TABLE II.

DETAILED STATEMENT OF THE GROSS REVENUE OF BURMA UNDER
EACH MAIN HEAD DURING THE YEARS ENDING 31 MARCH, 1906-
1905.

(IN RUPEES.)

Head of Revenue.	1896.	1897.	1898.	1899.	1900.
Land Revenue, Proper	24,850,040	23,969,610	26,462,700	28,072,300	29,790,000
Opium	200,520	225,140	233,950	245,115	252,040
Salt	1,560,520	1,409,280	1,545,440	1,581,550	1,536,080
Stamps	1,704,270	1,649,830	1,704,070	1,765,040	1,908,800
Excise	3,844,690	4,222,330	4,215,790	4,614,800	4,928,870
Provincial Rates	1,127,580	1,148,430	1,246,500	1,294,670	1,386,000
Customs	9,285,670	7,672,650	7,730,500	10,004,030	8,607,290
Assessed Taxes	812,270	852,970	1,014,960	1,015,440	1,064,220
Forest	5,695,830	6,378,000	7,215,200	8,356,890	7,812,650
Registration	61,850	64,770	71,370	80,590	98,530
Tribute from Native States,	349,730	305,770	311,860	364,850	313,380
Interest	41,180	41,550	40,760	41,720	29,370
Post Office	60	20	120	—	20
Courts of Law	465,810	442,760	448,970	483,530	478,300
Jails	367,480	359,840	377,100	426,440	394,337
Police	284,020	290,660	309,560	437,690	345,000
Marine	302,270	298,040	329,740	341,430	341,717
Education	15,300	21,740	18,190	22,770	19,918
Medical	19,080	16,520	25,570	22,910	27,434
Scientific and Minor Depts.	4,560	5,820	6,060	6,210	3,375
Miscellaneous	647,350	757,270	722,250	1,336,720	947,815
Railways	8,961,540	8,042,620	8,692,760	8,677,540	8,669,988
Irrigation	207,730	185,750	202,410	208,310	206,296
Other Public Works	413,630	272,920	437,600	439,290	451,282
Total Revenue	59,222,790	58,826,240	63,682,940	69,890,400	70,636,240

FINANCIAL AND POSTAL STATISTICS 837

TABLE II. (Continued).

DETAILED STATEMENT OF THE GROSS REVENUE OF BURMA UNDER EACH MAIN HEAD DURING THE YEARS ENDING 31 MARCH, 1896-1905.

(IN RUPEES.)

Head of Revenue.	1901.	1902.	1903.	1904.	1905.
Land Revenue, Proper . . .	31,965,535	33,148,222	33,369,749	35,229,914	37,075,481
Opium	267,474	314,412	442,003	599,573	649,489
Salt	1,840,785	1,528,881	1,830,199	1,548,365	1,638,131
Stamps	2,082,975	2,262,760	2,633,858	2,942,305	3,214,220
Excise	5,529,888	5,424,494	5,764,969	7,464,332	7,281,670
Provincial Rates	1,492,373	1,635,737	1,680,344	1,759,423	1,772,003
Customs	9,219,865	9,751,947	13,005,876	13,165,521	14,657,838
Assessed Taxes	1,153,291	1,251,102	1,247,820	1,224,983	1,403,015
Forest	8,054,444	5,873,808	6,739,003	8,268,535	8,959,756
Registration	100,372	108,910	139,191	179,465	185,161
Tribute from Native States	330,621	360,185	424,754	479,926	522,292
Interest	23,537	23,085	30,340	47,255	49,062
Post Office	14	10	—	63	29
Courts of Law	428,145	448,768	474,269	503,033	488,203
Jails	377,009	390,767	402,003	411,024	427,581
Police	369,703	372,442	392,900	421,571	450,616
Marine	408,508	390,194	465,897	487,991	526,587
Education	27,644	39,659	63,187	61,237	75,543
Medical	22,832	25,806	47,091	52,007	58,679
Scientific and Minor Depts.	3,800	6,715	3,584	3,823	3,376
Miscellaneous	753,935	807,126	801,865	846,532	1,051,289
Railways	11,234,182	12,232,691	12,667,364	14,106,899	15,148,710
Irrigation	121,967	86,475	148,605	211,746	223,996
Other Public Works	518,322	523,354	558,477	747,006	599,481
Total Revenue	75,760,128	76,998,700	83,334,080	90,753,639	96,562,298

TABLE III.

DETAILED STATEMENT OF THE GROSS EXPENDITURE OF BURMA
UNDER EACH MAIN HEAD DURING THE YEARS ENDING IN
MARCH, 1896-1905.

(In Rupees.)

Head of Expenditure.	1896.	1897.	1898.	1899.	1900.
Refunds and Drawbacks	242,080	260,800	314,500	310,179	272,081
Assignments and Compensation	—	—	1,400	820	23
Land Revenue	4,533,150	4,312,390	4,379,110	4,705,406	4,861,582
Opium	—	—	—	—	—
Salt	8,380	4,440	6,420	4,330	7,564
Stamps	41,900	44,550	48,940	52,480	51,230
Excise	133,400	163,740	192,300	220,620	194,267
Provincial Rates	55,150	30,050	50,860	58,570	58,362
Customs	230,220	234,790	274,120	309,590	292,160
Assessed Taxes	19,590	23,780	33,220	33,540	31,102
Forest	1,933,600	2,128,820	2,196,610	2,428,190	2,447,428
Registration	28,650	30,610	32,530	37,150	40,979
Interest	26,920	29,080	36,500	38,930	15,739
Post Office	132,980	160,520	165,160	170,480	174,678
General Administration	1,208,430	1,239,300	1,227,220	1,259,360	1,272,172
Courts of Law	2,553,130	2,424,250	2,412,900	2,427,720	2,330,465
Jails	1,227,110	1,394,390	1,041,730	1,357,800	1,096,214
Police	8,985,850	9,027,940	9,081,010	8,899,560	8,820,836
Marine	864,350	935,480	735,560	696,630	735,790
Education	719,540	722,360	789,710	809,700	912,627
Ecclesiastical	102,160	108,660	112,040	105,200	100,448
Medical	695,150	534,100	526,410	535,620	578,254
Political	483,740	333,460	402,280	441,440	512,862
Scientific/Minor Deptts	116,540	113,640	147,140	151,440	142,131
Miscellaneous Civil Charges	1,319,410	1,363,600	1,345,220	1,328,860	1,482,367
Famine Relief	—	555,240	627,870	960	—
On Railway Revenue Account	6,453,480	6,827,670	5,310,860	5,218,250	5,653,498
Irrigation	936,990	1,434,810	1,271,310	1,478,480	1,718,247
Military Public Works	1,013,680	974,170	844,560	863,920	790,164
Civil Public Works	6,354,370	6,786,120	6,176,740	6,732,530	6,283,793
Total Expenditure	39,997,950	42,229,600	40,083,390	40,475,800	43,081,098

FINANCIAL AND POSTAL STATISTICS 839

TABLE III. (Continued).

DETAILED STATEMENT OF THE GROSS EXPENDITURE OF BURMA
UNDER EACH MAIN HEAD DURING THE YEARS ENDING 31
MARCH, 1896-1905.

(IN RUPEES.)

Head of Expenditure.	1901.	1902.	1903.	1904.	1905.
Refunds and Drawbacks	313,432	330,291	482,108	538,001	477,836
Assignments and Compensations	823	1,612	1,237	21	423
Land Revenue	5,168,143	5,463,061	5,602,594	5,694,523	5,756,058
Opium	—	7,901	11,318	15,574	23,736
Salt	55,953	65,672	68,003	86,361	126,826
Stamps	190,177	229,636	476,751	701,455	1,024,268
Excise	56,625	74,073	70,947	77,924	59,983
Provincial Rates	356,042	359,998	365,539	355,843	394,798
Customs	35,554	37,448	39,628	38,341	34,954
Assessed Taxes	2,654,717	2,646,457	2,890,262	3,232,404	3,446,924
Forest	43,272	43,883	45,154	49,048	58,307
Registration	15,589	15,189	21,691	27,874	29,387
Internal	182,613	233,863	275,693	286,269	311,377
Post Office	1,337,294	1,316,013	1,574,154	1,410,966	1,456,854
General Administration	2,714,722	2,815,758	2,848,430	3,028,185	3,209,448
Courts of Law	1,037,840	1,175,556	1,066,388	1,075,757	1,017,490
Jails	9,184,339	9,520,816	9,456,547	9,633,881	10,118,578
Police	747,730	829,745	876,773	985,842	1,056,320
Marine	977,742	1,043,298	1,137,406	1,176,328	1,358,656
Education	164,392	99,582	92,362	100,836	114,767
Ecclesiastical	688,752	699,853	903,083	1,035,165	1,339,807
Medical	434,240	395,671	376,792	401,484	435,156
Political	185,323	250,461	211,902	227,108	296,701
Scientific & Minor Depts.	1,509,951	1,618,555	2,099,585	2,050,078	1,944,120
Miscellaneous Civil Charges	1,425	18	—	—	228
Famine Relief	—	—	—	—	—
On Railway Revenue Account	6,818,624	7,856,862	7,897,842	9,118,015	9,686,337
Irrigation	1,697,616	1,881,477	1,567,760	1,667,310	1,596,762
Military Public Works	693,063	643,984	841,200	647,927	563,022
Civil Public Works	10,067,302	9,343,713	10,015,321	10,896,049	10,589,924
Total Expenditure	47,218,407	49,000,446	51,346,381	54,678,299	56,690,647

TABLE IV.

REVENUE AND EXPENDITURE OF THE INDIAN POST OFFICE DEPARTMENT IN BURMA DURING THE YEARS ENDING 31 MARCH, 1895-1904.

Year ending 31 March.	REVENUE.					Grand total.
	Cash postage.	Sale of ordinary postage stamps.	Miscellaneous.	Total.	Official postage and service post- age stamps.	
1895	300,590	418,010	3,340	721,940	108,540	830,480
1896	312,830	445,150	3,830	761,810	112,920	874,730
1897	343,340	462,310	3,690	809,340	125,090	934,430
1898	375,680	490,570	4,540	870,790	135,500	1,006,290
1899	390,670	496,290	4,490	891,450	135,090	1,026,540
1900	411,749	485,744	3,849	901,342	128,121	1,029,463
1901	443,983	535,948	4,741	984,672	133,538	1,118,210
1902	454,239	477,702	5,024	936,965	142,072	1,079,037
1903	482,107	481,978	5,651	969,736	148,220	1,117,956
1904	522,248	538,583	5,926	1,066,757	164,927	1,231,684

Year ending 31 March.	EXPENDITURE.					Total.
	Salaries and allowances.	Miscellaneous and contingencies.	Mail carts.*	Bounty money.	Construction and repairs of buildings.	
1895	442,210	154,240	7,570	120	410	604,550
1896	438,100	171,590	6,690	190	920	617,490
1897	458,020	176,810	—	220	330	635,380
1898	461,240	164,170	7,240	260	1,000	634,910
1899	490,070	166,200	1,530	220	650	658,670
1900	447,321	171,109	1,524	116	658	620,728
1901	455,525	164,742	1,713	84	202	622,266
1902	449,833	185,378	1,570	41	86	637,608
1903	473,866	196,344	2,624	24	676	673,534
1904	495,948	213,580	2,724	137	82	712,471

* After deducting charges for passenger service.

FINANCIAL AND POSTAL STATISTICS 841

TABLE V.

POSTAL STATISTICS OF BURMA DURING THE YEARS 1885-1904.

Year ending 31 March.	NUMBER OF ARTICLES RECEIVED FOR DELIVERY IN THE POST OFFICES.				MONETARY VALUE.	
	Letters and Post Cards.	Newspapers.	Parcels.	Book- packages.	Number issued.	Value in rupees.
1885	3,308,333	570,495	47,346	84,055	106,804	3,775,880
1886*	6,625,325	1,011,910	75,555	141,828	155,855	4,560,460
1887	6,970,795	1,074,612	83,768	174,966	203,851	6,987,320
1888	8,809,274	1,462,412	126,745	244,406	287,906	10,705,090
1889	7,667,269	1,366,638	122,327	263,594	291,760	10,866,110
1890	8,274,198	1,544,484	132,978	471,684	331,859	12,464,150
1891	9,284,360	1,694,618	144,984	483,220	378,810	14,454,250
1892	9,980,760	1,946,467	174,340	625,652	425,437	16,040,280
1893	11,106,707	2,018,659	176,530	787,670	458,319	17,390,270
1894	12,245,854	2,186,976	186,698	988,654	471,117	17,086,190
1895	11,872,955	2,136,684	202,522	1,112,651	495,304	18,023,750
1896	11,886,016	1,962,001	187,065	1,289,571	515,980	18,982,910
1897	12,418,943	1,778,775	202,680	1,448,476	598,968	21,003,690
1898	13,373,470	1,799,919	209,223	1,546,688	648,158	23,140,260
1899	13,755,626	1,721,496	106,076	1,720,974	666,117	24,889,490
1900	14,456,399	1,289,310	108,471	2,282,096	726,369	26,365,790
1901	14,262,323	1,467,091	113,174	2,298,613	780,449	28,062,800
1902	15,498,683	1,665,704	135,122	2,603,362	824,550	28,669,780
1903	16,357,371	1,881,210	155,149	2,578,282	888,873	31,129,994
1904	17,412,596	1,786,023	188,726	2,379,253	979,680	34,543,232

*Upper Burma was annexed on January 1, 1886. From 1886 onwards the figures include Upper and Lower Burma.

THE PROVINCE OF BURMA

TABLE VI.

INDIAN AND BURMESE MONEY, WEIGHTS, AND MEASURES.

INDIAN MONEY.

3 pies	1 pice or $\frac{1}{4}$ anna.
12 pies	1 anna.
16 annas	1 rupee (1s. 4d. British currency).
15 rupees	1 gold rupee.
16 rupees	1 gold mohur.
100,000 rupees	1 lakh.
100 lakhs	1 crore.

INDIAN WEIGHTS.

4 dhans	1 ruttee.
8 ruttees	1 masha.
12 mashas	1 tola.
5 tolas	1 chittack.
16 chittacks	1 seer.
40 seers	1 maund (82 $\frac{1}{2}$ lbs.).

BURMESE MEASURES OF CAPACITY.

1 lamyet	1 gill.
9 lamyets	$\frac{1}{2}$ pint.
9 lamays	1 pint.
9 zalays	1 quart.
9 byees	1 gallon.
9 zayoot	1 peck.
9 seit	$\frac{1}{2}$ bushel.
9 hkwai	1 bushel.

BURMESE MEASURES OF WEIGHT.

2 pai	1 moo.
2 moo	1 mat.
4 mats	1 tical.
100 ticals	1 viss.
100 viss	365 lbs.

APPENDIX N.

DETAILS OF THE OPIUM
REGULATIONS

- I. Account of the Opium System in Burma, reprinted from the Report of the Philippine Opium Commission, 1905.
- II. Extracts from the Reports on the Administration of Burma during the Years 1903, 1904, 1905, dealing with Recent Changes in the Opium System.
- III. Rules for the Manufacture, Possession, and Sale of Morphia in Burma, dated 19th September, 1905.
- IV. Number of Persons arrested and convicted for Offences in regard to Opium and Hemp Drugs during the Years 1903-04 and 1904-05.

APPENDIX N.

DETAILS OF THE OPIUM REGULATIONS

I.

The following summary account of the Government control of opium in Burma is reprinted from the *Report of the Committee appointed by the Philippine Commission to investigate the Use of Opium and the Traffic therein*. The report was presented in June, 1904; and the only important changes that have taken place in the system since that date are the extension to Upper Burma of the system in force in Lower Burma, and the passage of stringent rules, applicable to Lower and to Upper Burma, forbidding the manufacture of and restricting the possession of morphia.

Account of the Opium System in Burma, reprinted from the Report of the Philippine Opium Commission, 1905.

An earnest and persistent effort has been made by the government of Burmah to protect the natives of the country against the opium habit. The belief prevails that the Burmese are more likely to go to excess than the Chinese or the Indians, who constitute the majority of the non-Burman population addicted to its use. Indeed, it is stated that the Burmese are likely to go to excess in both the opium and the alcohol vice.

An effort was made about a dozen years ago to prohibit the use of opium in both Lower and Upper Burmah and the question of forbidding its importation was considered. But the effort was not successful, for opium was smuggled in from all sides—by sea and by land—so that the government abandoned prohibition, seeing that it was doing no good.

The policy in force in Lower Burmah was then changed. It was made illegal for any Burmese to smoke or eat opium, unless he was twenty-five years of age and had been registered. Only registered Burmese were allowed to buy opium and they could buy only three tolas at a time. All Burmese who could prove themselves to be opium habitués were allowed to register up to 1893. Since that time no one has been allowed to register. The statements of the applicants for registration were considered sufficient evidence to entitle them to the privilege. According to a most credible witness, not more than thirty per cent. of the Burmese habitués (in Lower Burmah) availed themselves of the opportunity for registration. No one except the Burmese was required to register. An individual of any other nationality could possess three tolas of opium without registration.

The government opened certain shops for the sale of opium, between

forty and fifty in Lower and Upper Burmah. These shops were sold by auction to the highest bidder. The proprietors of these shops were the only persons who had the right to sell opium in the centres or districts where their shops were located. Sometimes these centres (or shops) were thirty or forty miles apart. They purchased opium from the government at a fixed price and sold it to their customers at any price they could demand.

The proprietor (or licensee) of a shop, having bought his opium at a fixed rate from the government, sold it at any price he could get to the registered Burmese or any one else who was not a Burmese; but not more than a certain number of tolas per head could be sold. Knowing the number of registered Burmese in a district and the approximate number of other inhabitants who used opium, it was not difficult to say about how much opium should be consumed—theoretically—at the rate of three tolas for each person authorised to use it.

The government sold the opium to the vendors, either raw or prepared, depending upon the demand. Generally the shop licensees preferred to buy their opium raw and prepare it themselves, as they found this procedure more profitable.

This method was found to be a complete failure, and with true British courage it was so acknowledged to be. It was found that the opium habit was spreading. In some places opium was considered necessary to control malaria. The demand was enormous, and to meet it an enormous supply was needed. The opium smoker—for opium is used in Burmah chiefly by smoking—often lived a four to six days' journey from the nearest shop; and as he could get only three tolas at a time, he frequently reached home with little or no opium, one-half tola per diem being considered a fair quantity for an habitué to use (one tola: 180 grains apothecary approximately). This was owing to the distance the habitué had to travel, thirty to forty miles and back, and to the difficulties and slowness of transportation. In many cases almost the entire time of an habitué was consumed in travelling to the shop and back.

Moreover, the system of registration was imperfect. The Burmese disliked to register and perhaps two-thirds of the users of opium failed to do so; and as no registration has been permitted since 1893, the many Burmese who have contracted the habit since that date are illegal consumers of opium, "practically outlaws."

As the Chinese were allowed to buy without registration or license, though only three tolas at a time, many of them bought this amount at various shops or at various times at the same shop under fictitious names, and then sold at higher prices to the Burmese. A business was thus started which debauched and impoverished the Burmese and enriched the Chinese. This could hardly be considered as protecting the Burmese.

It was then determined to increase the number of shops in Lower Burmah to sixty and give them out at a fixed fee of from 1,000 to 2,000 rupees per annum; for it had been demonstrated by the enormous prices paid, when the shops were disposed of by auction, that there was some source of profit to the proprietors not contemplated by the government. In fact, it was found that the men who bought the shop monopoly, bought also the monopoly of smug-

gling; for, as they were the only persons who could legally sell opium, they made it a point to sell all they could, of both government opium and smuggled opium. As these proprietors (always Chinese) made large profits, they were able to offer large bribes, and generally succeeded in bribing practically everybody. It was hoped that by diminishing the fee for the shop license to from 1,000 to 2,000 rupees and by placing in every opium-shop a man to watch the sales, called the "Resident Excise Officer," fraud would be decreased. The smaller license fee meant a smaller expense to the proprietor; and the presence of the Excise Officer, it was hoped, would deter him from any attempt at fraud. The Resident Excise Officer is a government detective. He is fairly well paid; and the increase of government expenditure caused by hiring these officers amounts to about 200 rupees a day.

Now if the Chinese vendor wishes to smuggle opium, he offers the Resident Excise Officer twice or thrice his salary and buys him. These officers are generally Burmese. The Chief Magistrate of Rangoon said that he had *some* honest Burmese Excise Officers. But even in that case, and when the vendor himself is honest, opium is smuggled from many points into the province or region blessed with the presence of at least two honest men, and its consumption increases.

The policy of the government of Burmah is to suppress the opium dens, and this policy is carried out wherever a den is discovered. Of course, some of them escape detection.

The opium traffic is enormously profitable in Burmah. Men have been known to accumulate fortunes in two or three years.

In order to escape punishment for smuggling, the vendors have been known to keep in their employ certain men, usually criminals, who will commit crimes for pay, and who will even permit themselves to be convicted of charges—of which the principal is really guilty—confessing themselves to be the guilty parties, under the consideration that they be paid a certain sum monthly during the period of the sentence.

Opium is bought in Calcutta for thirty to thirty-five rupees per seer (22 pounds), it is sold in Rangoon for sixty-five rupees; so that in the latter city one hundred per cent. is made. Further up the country still larger profits are made. As communication and transportation are difficult, the people up country are willing to pay two and one-half times as much as the government pays for opium.

Owing partly to the unsatisfied demand for opium, it is found that in Rangoon at least the hypodermic use of morphia and cocaine is becoming common. Dens for the hypodermic use of these drugs are springing up in Rangoon. Morphia and cocaine are imported from England and other parts of Europe in large quantities and are producing deplorable results. It is hoped that the government will suppress this evil.

In Upper Burmah the Burmese are prohibited by law from possessing opium. In point of fact, a witness testifies that this prohibitive law does not prohibit, for nearly as much opium goes into Upper Burmah as into Lower.

Formerly there was a strong religious feeling among the Buddhists against the use of opium, as there is in Japan, one of the Cardinal Commandments

of Buddha being interpreted to forbid the use of opium as well as that of intoxicants. As Buddhism continues to lose its power, this feeling continues to diminish in intensity. On the other hand, wherever there is a strong Buddhist feeling, there is a religious and social denunciation of the opium vice. In such places a Buddhist who smokes opium is classed with thieves, liars and outcasts; and the term "opium-smoker" is regarded by the Burmese as the epithet "liar" is by the Anglo-Saxons. Buddhism was once so strong a force as to keep the Burmese from the use of opium; but this force became weakened by contact with English influence. As a people usually passes from one religion to another through a period of ethical disorganisation during which evil influences are likely to triumph, so the Burmese, passing from Buddhism towards Christianity, have reached the ethical condition in which opium, morphia and cocaine can do the greatest harm. Unquestionably the government is doing all it can to fight against these vices; and though misunderstood by natives and reviled by those who should know better, it is working conscientiously and steadily for the protection of the Burmese.

The Chinese have been known to distribute opium gratis among the Burmese in order to cause them to acquire the opium habit. After this has been done, the Chinese sell, and generally at any figures they please. Sometimes Burmese children are thus led to contract the habit. This is the most hideous feature of all connected with the opium habit in Burmah.

To give an idea of the absolute failure of the policy of registration, the following is quoted verbatim from the testimony of the Chief Magistrate of Rangoon: "In Rangoon we have registered two thousand Burmese opium-smokers. In addition to that there must be at least three thousand five hundred who are not registered, so that there are about five thousand five hundred Burmese who are known to use opium. Out of that number throughout the whole city altogether only from eighty to ninety persons come to the opium shops daily to purchase opium; only that number. The amount that one person can purchase will not last more than six days. It might last very much less. You can see to what extent we supply the demand—only ninety persons out of five thousand five hundred. The rest must get it through hawkers and in other ways. These hawkers are generally Chinese, who buy three tolas here, three tolas there, and so on, and then sell it to the Burmese, registered and unregistered. It is simply a question of convenience." As the opium-smoker becomes lazy and inert, he will not go to the shop, but waits for the hawker or pedler to bring the drug to him. And the hawker—generally a Chinese—charges sufficient for the opium brought to realise a handsome profit. On the whole the system seems to have been a failure; and this is asserted by some of the highest authorities in Burmah, with admirable frankness and boldness. And the officials were engaged, at the time the Committee was in Burmah, in endeavouring to formulate and put into practice some method of protecting the Burmese against the opium habit. The Committee has not yet been able to secure a copy of the laws which it is hoped will accomplish this purpose; but it is expected that they will be on hand by the time that this report shall be submitted to the Governor of the Philippine Islands.

The following suggestions were made by the Chief Magistrate of Rangoon and seem to the Committee to be sound and wise:

(1) The government should have complete control of the opium business in all its branches. So long as the vendors have control they direct the business into any channels they see fit.

(2) The government should meet the real *bona fide* demand.

The vendors encourage smuggling for their own benefit. They find hirelings to go to jail for them, so that the real criminal may escape punishment.

The government should have sufficient shops to meet the real demand. It was suggested that the extent of the real demand might be discovered by permitting all shop licensees to have peddlers (or fakirs), who would go from village to village and find out all opium-users. This method would greatly increase the number of shops as well as the *apparent* consumption of opium. While the quantity of opium consumed would probably be increased, the apparent increase, due to getting an accurate account of all the opium consumed, would undoubtedly subject the government to criticism. At the time of the Committee's visit to Burmah there seemed to be no limit to the consumption of opium, as it was so easily smuggled into the country.

The law of demand and supply exists and cannot be overcome. As the Chief Magistrate said, "the facts should not be concealed at all." Surely the facts are necessary in order to form a sound conclusion, and any effort to conceal or pervert facts that bear on so grave a question as the use of opium should be met with the stern condemnation uttered by this witness. This witness held that the use of opium is not so grave a matter as some maintain, that the opium-smoker is usually quiet, lazy, sleepy, useless and given to petty theft, but never violent or a menace to society. His evil is inflicted on himself and on those dependent on or connected with him. However, the habitué must have his opium, or he will commit any crime to get it; though he may be perfectly gentle and harmless after he has had his dose.

The ease with which opium may be smuggled into a country was dwelt upon. This witness recommended (a) that the demand for opium be met fairly and squarely, and (b) that an effort be made through educational and religious influences to suppress its use. He recommended inculcating through the schools a dread and contempt for the drug, hoping thus to get an ethical hold upon the young. He believed that by creating a strong feeling against the use of opium it might ultimately be abolished, just as lying has been practically abolished in Anglo-Saxon schools by teaching the children to hold lying and liars in contempt. A feeling of this sort still exists in Upper Burmah and might be strengthened in the way just indicated. This witness thought that if this feeling could again be created through the schools, the opium habit would disappear.

Another witness of high position did not think that there was any need of cultivating a feeling against the use of opium, as he believed that it was already sufficiently strong, or at any rate as strong as such an influence could be.

Legislation was regarded so far as a complete failure. There were many crimes against the opium laws and many convictions—often of the wrong persons—especially for smuggling.

The present system seems to have diminished the smuggling of opium

somewhat. Some officials believe that it has diminished the use of opium among the Burmese. The number of shops in Burmah is ninety-one at the present time, but it is the intention of the government to have more, with a view to meeting the demand, preventing smuggling and controlling the use of opium.

Raw opium costs one rupee per tola, cooked opium one rupee and eight annas, the prices at which it is sold by the government to vendors. The vendors sell it at any price it may bring.

It has not been found easy to cause the vendors to co-operate with the government; and when they do not do so, their licenses are not renewed. This witness believed the Chinese to be more injured by opium than the Indians. The latter, he said, use it moderately, as do also the Burmese, the amount consumed being only one-eighth tola per diem. The young Burmese, however, are inclined to use it to excess. The purpose of the government is to protect the Burmese against the vice.

One of the most noteworthy purposes for which opium is used is to dull the feelings of boys while being tattooed. All Burmese boys are tattooed in the most intricate and artistic patterns from the knee to the waist, so that they seem to be wearing a pair of skin-tight trunks. The process of tattooing may last for many days, and is usually performed while the subject is under the influence of opium. There is danger that the Burmese youth may contract the opium habit while undergoing this process. All tattooers have licenses to buy and administer opium.

One witness, a physician of large experience in Rangoon, stated that a very small proportion of the Burmese use opium, owing to a social and religious feeling against it. He further said that while more Chinese than Burmese use it, the number of the former is not large. He called attention to the fact that among say twenty Chinese who are physical wrecks, not more than one owes his condition to the use of opium. He stated that the Chinese born in the Straits Settlements, under British influence, as a rule do not use opium. This view was confirmed by the testimony of other witnesses. This witness did not believe the moderate use of opium to have any deleterious effect, mentally or morally. Its constipating effect, he said, sometimes produces injurious results, such as diseases of the liver. He thought that users of opium are not so likely to be employed as non-users.

This witness stated that he knew of one case, a Burmese, who had voluntarily abandoned the use of opium, to which he had been addicted for years. The Committee has reason to believe that it questioned personally the man referred to; but, if so, he denied that he had ever known of an habitué's abandoning opium.

Mention was made of the fact that prisoners are compelled to stop the use of opium on entering prison and experience no permanent ill results from doing so. This witness believed that there was much more danger for the Chinese and Burmese in the growing use of alcohol than in that of opium. He considered the opium vice in Rangoon almost infinitesimal as compared with alcohol evil in London. The combined use of alcohol and opium appeared to this witness to be very detrimental.

A prominent Parsee physician stated to the Committee that about five per

cent. of the Chinese use opium, and a smaller percentage of Burmese. The latter, he said, usually take the drug in pill form, whereas the Chinese smoke it. He believed the native of India to bear the effects of opium best, the Chinese next and the Burmese worst. He mentioned the custom of giving opium to children in order to quiet them, especially in India. He believed the use of opium to be increasing. In his opinion, the results of its use in moderation are exaggerated, and stated that if a person accustomed to its use were to abandon it, he would not be likely to resort to alcohol. He thought that a law prohibiting the use of opium might do harm. He stated that the use of the drug prevents the chill manifestation of malaria by dulling the nervous sensibility to the malarial poison. The use of opium appeared to this witness to be preferable to that of alcohol. The use of the latter is increasing in Burmah, as the alcoholic drinks which are brought from Europe are more palatable than the native drinks and therefore more widely consumed.

A native Burmese whom the Committee interviewed stated that he was opposed to the use of opium in any form or quantity, as all its effects are bad. Its use, he said, is increasing and is particularly deleterious to the Burmese. He called attention to the Buddhistic commandment which is interpreted to forbid its use. He mentioned the fact that opium is often smoked wrapped with tobacco in cigars. He was of the opinion that an opium habitué would probably resort to alcohol if deprived of the drug. He advised allowing a period of three years within which the users of opium might cure themselves of the habit, at the end of which time total prohibition should be enforced.

A well-known missionary of Burmah stated that in early days the use of opium in Mandalay was confined largely to the Chinese. This is not so markedly the case now. He was of the opinion that the question of revenue was a factor in the policy of the Government. He believed the whole influence of opium on the user to be the weakening of moral principle. The Chinese, he said, collect opium from the poppy and cook it to be used on the same day. He also called attention to the complete prostration of coolies who use it, when deprived of it. Of the Five Great Commandments of Buddha, the one which reads, "Thou shalt not drink intoxicating liquors," is supposed to include opium. He believed the use of alcohol to be increasing even more rapidly than that of opium. He called attention to the fact that the Chinese farmer had opium distributed in small pieces among the children in order to increase its use, and that a similar custom prevails of giving free alcoholic drinks to people for the same purpose. Both of these practices, he said, were highly successful. This witness stated that cocaine is used. He had known of some cases in which persons who were deprived of opium became insane or died. He referred to a decoction by using which some of the opium-smokers of the Shan States are able to break off the habit entirely. The Committee was unable to secure a sample of this decoction or the prescription for making it. This witness had suggested to the Royal Opium Commission the advisability of trying prohibition against opium in Burmah. He believed, however, that the habit had already gained so strong a foothold that such a measure would be useless. It was his opinion that much good can be done through the schools by teaching the children to abhor opium, to condemn its use and

to look down upon its users. He stated that King Theebaw was opposed to the use of opium.

The lessons most plainly taught by the failure of the opium laws in Burmah are:

(1) The inadvisability of permitting the vendors of opium to derive a profit from its sales. They should be salaried officials, held to strict account and bonded if necessary.

(2) The impossibility of keeping a people or class from using or obtaining opium when another people or class in juxtaposition to it is permitted to use or obtain the drug.

II.

EXTRACTS FROM THE REPORTS ON THE ADMINISTRATION OF BURMA, DEALING WITH RECENT CHANGES IN THE OPIUM SYSTEM.

From the Report of 1902-03.

The record of the administration of the opium excise was of more than ordinary interest, as certain important changes therein were introduced into Lower Burma during the year under review. In accordance with the rules under the Opium Act of 1878, no Burmans, other than persons in Lower Burma, who have registered themselves as opium consumers, are permitted to possess opium. It had for some years past been the general opinion that the restrictive policy was failing, owing to the large amount of contraband opium which was smuggled into the country and which was obtainable alike by the non-registered and registered opium consumers. The measures adopted in 1893 for restricting the consumption of opium by Burmans in Lower Burma to persons then over 25 years of age, who came forward and registered themselves as habitual consumers of the drug, had proved ineffectual, partly owing to defective registration and partly because the reduced number of shops was insufficient to afford reasonable facility of supply. In order, if possible, to kill the illicit traffic, and render effective the policy of prohibition, a change in measures involving an increase in the number of licensed shops, direct supervision over the sales from these shops and considerable additions, amounting to re-organisation, in the excise staff, was introduced into Lower Burma; and similar measures have been sanctioned for Upper Burma and will be introduced from the 1st April 1904. The number of shops in Lower Burma was increased from 26 to 60; the right to sell was given to selected vendors at a fixed fee of Rs. 1,000 in place of being disposed of by auction to the highest bidder; sales were permitted only between fixed hours and under the eye of a Resident Excise Officer; the profit of the vendor was regulated by the difference between the fixed wholesale price at which opium was issued from the Government treasury and the fixed price at which he was bound to retail it; a further opportunity was given to Burmans who had failed to register themselves in 1893-94; and a much larger preventive staff was entertained. The abolition of the system of auctioning the right of retail vend and the substitution of selected vendors at a small fixed fee resulted in a decrease of more

than 16 lakhs in license fees, but this was counterbalanced or nearly so by an increase from 37,232 seers to 50,026 seers in issues of Government opium, and by the enhancement of the price at which opium was supplied to the licensee in Lower Burma from Rs. 33 to Rs. 60 a seer in most cases. Financially the net result of the change in the system, excluding receipts from confiscated opium, was a decrease in revenue receipts of Rs. 15,129.

The results of the new measures, in so far as they can be judged from the first year's working, have been carefully watched and considered. Briefly summarised, the conclusions at which it has been possible to arrive are that a distinct check has been given to the contraband trade owing to the displacement of illicit opium by Government opium sold to authorised consumers from the licensed shops, but that the measures have not been altogether successful in restricting consumption, and in keeping opium out of the hands of non-registered Burmans. The system has not, however, been in force for a sufficient length of time to permit of a decided opinion being formed as to its success or failure.

From the Report of 1903-04.

The arrangements described in last year's Report continued in force with some modifications in detail. The vendors' profits in some of the larger shops had been excessive, and these were reduced by raising the fee and the wholesale rate per seer. The number of shops was further increased by 31. In last year's Report it was seen that the increase in receipts from duty under the new scheme was balanced by a loss in license fees, while there was a large increase in expenditure owing to the strengthening of the staff. The sales of opium have now further increased to so large an extent that the net revenue, even if the whole cost of the excise establishment is debited to opium, far exceeds that under the old system. The sales rose from 37,232 seers to 50,026 in the first year of the new scheme and now show a further rise to 70,446. This result has been obtained mainly by the destruction of the trade in contraband opium, through the lowering of the retail price, the increase in the number of shops, the better supervision of the vendors, and the activity shown by a better paid and more efficient preventive staff.

While it is true that the system has failed to prevent the hawking about the country of the three tola packets bought at shops, or to keep the drug away from the Burman who gets it through a person entitled to buy, the general opinion is that the amount of opium consumed in the Province has not increased, and that the large profits shown in the returns have been obtained, not by the spread of the opium habit, but at the expense of the smuggler. The contraband trade has not been destroyed, but it has certainly been decreased and in some districts broken up. It is now proposed to reduce the opportunities for petty hawking of Government opium by directing Resident Excise Officers to prevent sales to individuals in excess of their probable consumption or means of purchase. This will tend to check the practice of buying on behalf of unregistered Burmans, but it is impossible altogether to prevent this, and no satisfactory measures have so far been suggested for the exclusion of Burmans from opium dens where they are taught the habit.

From the Report of 1904-05.

A decline of over a lakh in the receipts from license fees was the result of the extension to Upper Burma of the system of vend which has been in force in the Lower Province since 1902, but the simultaneous enhancement of the wholesale price of excise opium from Rs. 33 to Rs. 60, with higher or lower prices in certain districts, produced an increased revenue of about Rs. 80,000, while the financial success of the innovation may be anticipated from the fact that in Lower Burma the receipts from duty on excise and foreign opium rose from Rs. 4,292,387 to Rs. 5,011,715 as the system developed. Part of this increase is to be attributed to the enhanced price at which opium was issued from the treasury in some districts, but though, towards the end of 1904, retail sales were restricted to an amount calculated on the consumer's means or capacity of consumption, the issues of opium to the shops in Lower Burma exceeded by 8,218 seers the quantity issued in the previous year, and in only one district was less opium drawn from the treasury in consequence of the restriction. The abolition of the auction system was accompanied by an increase of eight in the number of shops in Upper Burma where the opium habit is practically confined to non-Burmans. The restrictions on individual purchases were designed to suppress the hawking of illicit opium which had become very prevalent under the new system, and the increasing use of cocaine necessitated the issue of a notification declaring it to be an intoxicating drug and prohibiting its possession except for medical purposes. Proposals for the better regulation of the sale and possession of morphia were also under consideration (see section III. of this Appendix).

III.

RULES FOR THE MANUFACTURE, POSSESSION, AND SALE OF MORPHIA IN BURMA, DATED 19TH SEPTEMBER 1905.

The following is a summary of the new rules in regard to the manufacture, possession, and sale of morphia in Burma:—

- (1) The manufacture of morphia in Burma and the use of morphia manufactured in India are forbidden. The prohibition against manufacture does not prevent a person duly authorised to possess morphia from making it into various mixtures any more than the prohibition of the manufacture of opium bars the preparation of raw opium for smoking.
- (2) Medical practitioners as defined in Rule 1 (xiii) of the Opium Rules possess the same freedom of possessing, importing, dispensing and selling morphia for the purposes of their profession as hitherto, but they may not manufacture morphia (*i.e.*, prepare the drug from the poppy).
- (3) Under Rule 47A., a license to import morphia into Burma wholesale will be granted to a single chemist in Rangoon and importation otherwise than by this chemist, by Government, and by medical practitioners is prohibited.

DETAILS OF THE OPIUM REGULATIONS 855

- (4) Pharmacists as defined in Rule 1 (xiv) of the Opium Rules are required to take out licenses for the sale of morphia. The maximum amount which they are allowed to keep in stock is limited as an ordinary rule to 3 ounces. Their licenses authorise them to sell morphia to medical practitioners and other pharmacists or to the general public. Sales to the general public are allowed for medical purposes only, and to those persons only who produce prescriptions signed by a medical practitioner.
- (5) The general public are prohibited from possessing morphia except in quantities not exceeding five grains *avoirdupois*, and are debarred from buying morphia except from a medical practitioner or from a pharmacist duly licensed to sell morphia, in pursuance of a prescription of a medical practitioner.

IV.

NUMBER OF PERSONS ARRESTED AND CONVICTED FOR OFFENCES IN REGARD TO OPIUM AND HEMP DRUGS DURING THE YEARS 1903-04 AND 1904-05.

			1903-04.	1904-05.
			No. of Persons.	No. of Persons.
Opium	Smuggling of Illicit Opium	Arrested	146	138
		Convicted	124	112
	Illicit Cultivation	Arrested	6	1
		Convicted	6	—
	Unlicensed Sale	Arrested	334	244
		Convicted	290	187
	Illicit Possession	Arrested	2,399	2,979
		Convicted	1,952	2,639
Hemp Drugs	Smuggling Hemp Drugs	Arrested	38	46
		Convicted	31	39
	Illicit Cultivation	Arrested	17	26
		Convicted	16	19
	Unlicensed Sale	Arrested	21	14
		Convicted	17	12
	Illicit Possession	Arrested	387	421
		Convicted	317	326

APPENDIX O.

DETAILS OF LAND REVENUE
SETTLEMENT IN LOWER
BURMA

APPENDIX O.

DETAILS OF LAND REVENUE SETTLEMENT IN LOWER BURMA

(Reprinted from "*Directions to Settlement Officers. Revised Edition, 1885,*"
Rangoon, Govt. Press, 1885.)

DIRECTIONS TO SETTLEMENT OFFICERS.

INTRODUCTION.

Under the Burmese Government there was no system of land assessment, properly so-called, at all. The "rice-land tax" was not assessed upon the land, but, generally, upon the number of cattle employed in working it. The revenue obtained was comparatively insignificant. The assessment was made by irresponsible subordinate officers, who, after paying a certain sum into the State treasury, were accustomed to levy such additional contributions as they pleased for their own benefit. Rights in land were consequently of little value.

Upon the accession of the British Government the cattle assessment was set aside. The revenue was fixed according to certain rates on the land. The assessment was made by officers responsible to the Government, and the right to occupy land for cultivation was recognised. The revenue, as a natural consequence, steadily increased.

As cultivation extended, a rough method of survey was introduced. Estimates were made of the productiveness of the land, acre-rates were fixed, one rate on each *kwin*,* sometimes on each circle, without respect to internal differences in fertility, and registers of cultivators were drawn up. Rules for the assessment and settlement of the land revenue were issued; and these rules, in a slightly modified form, have continued in force up to the present time. The right of the State to 20 per cent., or one-fifth of the gross produce of the land, was declared. *Kwin* and holding surveys, more or less imperfect, were made in districts where cultivation was making rapid progress. In certain parts of the Province *kwin* settlements on the model of the Indian village settlements were experimentally introduced. The absence of communal institutions, such as are found in India, and which insure, to some extent at least, protection to all, was fatal to the experiment. Holding settlements on the Indian model were tried, and partially succeeded. Records of occupation in land were drawn up; but little more than the names of the actual occupiers was known; and there was no provision for keeping the records abreast of the changes occurring from year to year.

A field-to-field survey and regular assessment of the land are now to be made, the objects in view being as follows:—

* Compact areas of land frequently enclosed within natural boundaries.

- (1) a complete survey of all lands;
- (2) registration of all cultivators of land, with specification of their various interests under the law;
- (3) an equitable assessment of the land revenue on sound principles and on an uniform system;
- (4) punctual registration of all transfers of land, and of all changes in the occupation and use of land.

CHAPTER I.

DEMARCATON OF LANDS PRELIMINARY TO SURVEY.

The operations of demarcation are legalised by Act No. V of 1880 (Burma Boundaries Act) and by the rules issued under that Act, which have the force of law. Detailed instructions for the better carrying out of the rules have been issued.

2. This part of the work should be taken in hand a season in advance of the survey. Much of it can be completed before the rains set in; but the demarcation completed during the dry weather should be periodically inspected during the rains in order that the injuries done to boundary marks by floods may be remedied in good time and the vegetation, which springs up so rapidly during the rain and obliterates the clearings, kept down.

3. The demarcation will be carried out by a Demarcation Officer under the supervision of the Boundary Officer, who should check portions of the work in the different circles to ascertain that it is accurately carried out. Preliminary to and during survey, the Boundary Officer will generally be either the Deputy Commissioner of the district or the Subdivisional Officer or some other officer with special local knowledge. After the survey has been completed, the duties of the Boundary Officer will devolve on the Settlement Officer.

4. The *thugyi** should be the Demarcation Officer's main instrument in carrying out this part of the work. He knows the people, has some knowledge of the country, and can, generally speaking, get the people to come out and help him. Each *thugyi* should, therefore, be the demarcator of the *kwins* in his circle, unless found incompetent, in which case a substitute, to be paid by him, should be appointed.

5. The work of demarcation is not at present likely to be beset with many difficulties, except those arising from the dense vegetation and configuration of the country. Boundary disputes, properly so called, cannot often occur, because, except in the case of waste land grants made under the old rules,† the principal classes of boundaries which the Demarcation Officer has to demarcate are not the subject of private rights of property.

6. The demarcation should be carried out according to the rules and directions given under the Burma Boundaries Act.

* Village headman.

† Arakan Waste Land Rules, 1839-41.

Pegu Waste Land Rules, 1863-65.

Rules for the Sale of Waste Lands, 1893.

CHAPTER II.

THE SURVEY.

7. The survey which is to precede settlement, and upon which the operations of settlement are to be based, is executed at present by professional surveyors under the superintendence of an officer directly subordinate to the Surveyor-General of India.

8. The survey, therefore (which includes preparation of maps), is not one of the Settlement Officer's duties, and he is not in any way responsible for it or concerned with its management. At the same time there is necessarily a close connection between the Deputy Superintendent of Cadastral Survey and the Settlement Officer. Each is naturally interested in the operations of the other, and the interdependence of the two is highly important. The following paragraphs are intended rather to indicate the general character of the relations between the two departments than to lay down formal instructions.

9. The Settlement Officer should, after consultation with the Deputy Superintendent of Cadastral Survey, determine which tract is to be surveyed in the following season. As a general rule the survey should proceed in order of contiguous circles.

10. The Deputy Superintendent of Survey has to look to the Boundary Officer for solution of most of his demarcation difficulties. No rules, however precise and detailed, can ever insure perfect results. Even after demarcation has been carried out according to the rules the professional Surveyors are likely to find difficulties from time to time, which will necessitate references to the Boundary Officer. Boundary-posts will occasionally be found to have been removed; jungle will now and then be found not cleared; areas of *kwin*s newly laid out will be occasionally found inconveniently large or inconveniently small; garden and orchard lands may be found so imperfectly marked off or enclosed as to need orders from the Boundary Officer to have the boundaries marked off, and so on. A rapid disposal of all such matters will greatly facilitate survey work.

11. The Survey Department make a plan of each *kwin*. The area of country to be surveyed is first divided into great blocks or main circuits, the limits of which are generally connected with Great Trigonometrical Survey stations. These main circuits are subdivided into minor circuits formed on the same principle. The country having been thus divided into a series of larger and smaller polygons, the area of each larger polygon and the areas of its included smaller polygons are independently calculated, and the results proved by the total area of the latter agreeing with that of the former. From the smaller polygons the Surveyor next proceeds to plot skeleton plans of the *kwin*s. These plans are handed over to the Field Surveyors, who, with plane-table and chain, fill in all the interior details and turn out a plan of the *kwin* showing every existing boundary, both natural and artificial. The computation of the numerous interior areas is a separate process worked out by a special staff. The total of these interior areas must agree with the area of the *kwin* polygon obtained by the mathematical process.

12. The possible amount of error in the position or area of any *kwin* is reduced to a minimum by the preliminary construction of main and minor circuits, of which the geographical position is guaranteed by their being connected with great Trigonometrical stations. The principle consists in working down from the greater to the less, the greater being the main circuit, a polygon of which the area is ascertained with scientific precision, the less being the *kwin* and its interior divisions. Areas are readily checked, errors easily detected and rectified, when the difficulties of the great exterior boundaries and the possible margin of internal errors are overcome.

13. The Settlement Officer looks to the Survey Officer for thoroughly accurate statistics of boundary and area. He has to depend upon these: they are at the root of his work. While, therefore, neither qualified nor authorised to exercise any general check on the detailed work of the survey, he should be always on the watch for inaccuracies, and report them at once to the Deputy Superintendent. The latter officer cannot judge properly of the quality of the work done by his staff unless the Settlement Officer, whose duties give him frequent opportunities of testing it, freely communicates to him the results of his observations.

14. The Survey Department is required to supply to the Settlement Officer, on or before the 1st November of each year, hand-made tracings of the plan of each *kwin* surveyed during the past season, along with a statement showing the exact area, in acres and decimals of an acre, of every division of land shown under a separate number on the map. During the record and inspection work which the Settlement Officer has to undertake in the succeeding season, he will have the cultivators constantly before him, both in the field and in the camp, and errors in field boundaries or areas will very soon come to light. These will be entered by the Settlement Officer in the errata statements for each *kwin*. Where there is a revision survey simultaneous with settlement, the traces of *kwins* in which serious or numerous errors are found will be made over with their errata statements to the Revision Survey for correction. Where there is no simultaneous Revision Survey, and in *kwins* in which the errors are few and immaterial, the errata statements will be attached to the traces and deposited at the end of the year in the Supplementary Survey office so as to be corrected the year after settlement.

Note.—The Revision Survey consists of a party detached from the camp of the Deputy Superintendent of Survey to correct errors in the traces during the season of settlement.

15. Besides *kwin* maps, the Deputy Superintendent of Survey should supply the Settlement Officer, on or before the 15th October, with a two-inch topographical map of the entire tract cadastrally surveyed during the season, showing the *kwin* divisions and chief physical features. This topographical map should be the Settlement Officer's *vade mecum*. He should never be without it. The principles on which he is required to proceed in his work of assessment and the practice which he is required to adopt (*see* Chapter V), not to speak of personal convenience, necessitate a constant reference to such a map. It is most important that this map should be supplied punctually.

16. The Settlement Officer should report to the Deputy Commissioner, Commissioner, and the Revenue Secretary to the Chief Commissioner, on or before the 1st November of each year, the names and areas in square miles of the circles in which settlement operations will be carried on in the ensuing season.

CHAPTER III.

CROP-CUTTING AND STATISTICS OF OUT-TURN.

17. The land revenue in British Burma consists of a share of the produce of the land. It becomes, therefore, a matter of the first importance to ascertain what precisely is the amount and value of the crops which the land can, and habitually does, produce.

18. In Burma the inquiry is much simpler than in other provinces of the empire, for while in the latter the descriptions of produce are very various, in Burma there may be said to be only two, namely,—

(a) *paddy*, which is the great staple of the country;

(b) *miscellaneous garden produce*, which is minor both in quantity and importance.

19. The established method of determining the productiveness of paddy-land is cutting and measuring the crop. The process is legalised by section 57 (b), Act II, 1876.

20. The chief difficulty lies in the selection of lands the produce of which is to be ascertained. In former inquiries of this nature portions of paddy-fields of insignificant area were apparently taken here and there, and their crop measured up. But there seems reason to believe that the results obtained were not altogether reliable as standards upon which to base assessments on a large scale.

21. Much of the success of the settlement will depend on the judicious selection of areas. A careless, hurried, haphazard choice may mar the result of many subsequent operations, however carefully carried out, whereas a well-judged choice, coupled with caution and attention in the after details of reaping and threshing and measuring, will greatly help to the success of the settlement. It should be borne in mind that, not only will the amount of the land revenue be affected, but its incidence in different localities and on different cultivators and, therefore, the measure of approval accorded by the people will be very much determined by the result of the operations.

22. The selection of areas for crop-cutting will be the first work undertaken by the Settlement Officer in the tract destined for revision of assessment. It cannot be put off altogether till the dry weather, because the paddy ripens about the beginning of December, and so nearly simultaneously all over a district that when the harvest begins there is barely time, even with a staff scattered all over the tract, to reap, thresh, and measure so as to keep up with the progress of the harvest: no time is left for choice of areas. The selection of areas for crop-cutting will be carried out under the orders of the Settlement Officer generally by Inspectors. The Settlement Officer should himself carefully superintend the selections made.

23. It may not be necessary to make selections in every *kwin*. It may

sometimes happen that a cluster of *kwin*s are so closely allied in natural character and agricultural conditions as to render a *kwin-to-kwin* selection unnecessary. But this is not likely often to occur. Natural variations are perpetually occurring, and, with the extension of cultivation, artificial conditions must be continually varying. While in many cases a selection in each *kwin* may not be required, on the other hand it may frequently be necessary to make more than one selection in the same *kwin*.

24. The principle which should guide the Officer making the selections is that the result to be obtained should be—

- (a) representative of the normal productiveness of the *kind* of land to which the selected area belongs;
- (b) representative of the productiveness of the kind of land to which the selected area belongs under *varying conditions* of agriculture;
- (c) that the average finally to be deduced should be capable of application to the whole homogeneous area without fear of over-estimating the productiveness of any one part or of much under-estimating that of any other.

25. It is of course possible to assess each field independently on its own ascertained productiveness. But then the work of assessment would never end, and the assessments, varying with the temporary and accidental circumstances of each holding, would be of the most unstable character. The important matter is to discover the normal limits of productiveness—the higher and the lower limit—the mean between which may be assumed fairly to represent the value of the land within a homogeneous block.

26. No two fields, even of apparently identical area and natural quality, will yield exactly the same amount of grain even if cultivated in exactly the same way. The difference will, therefore, be ordinarily greater when the fields are not of the same natural quality. This difference will be augmented by variety in the circumstances under which the fields are cultivated, *i.e.*, by differences in the class of cultivators, in the condition of the cultivators, in the kind of plough-cattle used, in the modes of cultivation, in the kind of seed sown.

27. The Settlement Officer should, therefore, first determine what (if any) are the great natural divisions of soil in the *kwin* and how they lie to each other. Having thus obtained the natural factors in productiveness, he should proceed to discover the artificial factors. This will best be done by selecting from each block an area which includes fields cultivated by two or more persons holding on different tenures, ploughing with different kinds of cattle, and cultivating in different ways.

28. Entire fields should be taken and the fields selected should not be less than one-third of an acre, and should be half an acre if possible. Where the fields are very small two or more adjacent fields of similar position in one holding may be selected. Parts of fields must not under any circumstances be selected.

29. The selection made, block by block, the fields should be staked off; a record of their numbers and areas should be there and then made, and columns 1 to 8 of the Statement I in Appendix II should be filled in. Column 9 will be filled in after the soil classifications have been made.

30. Notice should be given to the cultivators concerned, to the *kyedangyi** of the village, and to the *thugyi*, of the fields selected; and the cultivators should be required to report, through the *kyedangyi* or *thugyi*, when they intend to begin reaping, in order that the cutting of the selected crops may be simultaneous with that of the rest of the holdings and no hardship be inflicted on the people.

31. When harvest time arrives, the Settlement Officer in person, or through his Inspectors or holding recorders, should have the crops cut, sheaved, threshed, winnowed, and measured strictly according to local custom, except that the measure used should be the Government standard basket. The difference between the standard and the local measures should, however, also be noted.

32. The method of crop-cutting is, for obvious reasons, not applicable to lands devoted to miscellaneous or garden cultivation. Inquiry and comparison over as wide an area as possible must be resorted to.

33. Lands devoted to miscellaneous and garden cultivation should ordinarily be classed according to the kind of produce, fruit or timber, raised. Differences in the nature of the soil should not interfere with this classification, except where they are very marked and materially affect productiveness.

34. Average rates of productiveness for each class of miscellaneous and garden cultivation should be worked out from produce statistics gathered from as wide and diversified an area as possible.

CHAPTER IV.

RECORD OF RIGHTS AND OCCUPATION IN LAND.

35. The object of this part of the Settlement Officer's duty is to ascertain and record the exact area of land occupied by each cultivator, and the kind of tenure upon which he occupies.

36. The Survey Department furnishes a map of each *kwin*, showing—

- (a) the cultivated (including fallow) area, field-by-field, each field separately numbered;
- (b) the uncultivated and unoccupied area divided into blocks, separately numbered, of differing physical character, such as tree-jungle, grass, swamp;
- (c) the uncultivated and occupied area, divided into blocks, separately numbered, according to the kind of occupation, such as village-site, monastery land, and road.

37. Along with the *kwin* map the Survey Department furnishes an area statement, showing the area of each field and block described in (a), (b), (c) of paragraph 36 in acres and decimals of an acre.

38. These two documents furnish to the Settlement Officer the raw materials for the preparation of the register of holdings.

39. Part II, Act II of 1876 is the law under which original rights in the land are acquired. It defines these rights and describes the modes in which

* Headman for the purposes of the District Court and Rural Police Act.

they are acquired. To this law, therefore, and to the rules issued under it, and which have the force of law, the Settlement Officer has to look in preparing the record-of-rights and occupation in land.

40. Section 4 of the Act specifies the descriptions of land which are exempted from the operation of Part II, namely,—

- "(a) land included in any forest constituted 'a reserved forest' under the law for the time being in force;
- "(b) land included in any fishery demarcated under the Burma Fisheries Act, 1875;
- "(c) the soil of any public road, canal, drain, or embankment;
- "(d) land included within the limits of any town;
- "(e) land appropriated to the dwelling-places of any town or village;
- "(f) land included in any military cantonment;
- "(g) land included in any civil station;
- "(h) land belonging, when this Act comes into force (*i.e.*, 1st February 1879), to the site of any monastery, pagoda, or other sacred building or of any school, and continuing to be used for the purposes of such monastery, pagoda, building, or school."

No rights of the kind described in Part II can be acquired under the Act in these classes of excluded lands; and, therefore, with the record-of-rights in respect to them the Settlement Officer has no concern, except—

- (a) in defining, where necessary, and deciding questions that may arise regarding, their exterior boundaries under section 5 of the Act;
- (b) in registering their numbers and areas in the record.

41. The Settlement Officer's operations under this chapter embrace all lands other than the excluded lands described in paragraph 40, and to these the present directions apply.

42. Under Native government the sovereign was regarded as the proprietor of the land. This principle has been embodied in the Burma Land and Revenue Act, II of 1876, which recognises the ownership of the land as vested in the State, except in two cases, namely,—

- (a) when by length of possession,* coupled with regular payment of revenue, a prescriptive right against the State has grown up;
- (b) when the State has created rights in favour of individuals.

43. The right referred to in (a) is the right of "landholder" defined in section 8 † of the Act.

* Possession is defined in section 3 (a) of the Act as follows:—

"Land is said to be in the possession of a person under this Act:—

- "(1) when it is occupied by him or by his servant, agent, tenant, or mortgagee, or by some other person holding under him;
- "(2) when he, his servant, agent, tenant, mortgagee, or other person holding under him, has paid the revenue which fell due in respect of such land during the last preceding year of assessment as fixed under section 41;
- "(3) if such land, left fallow in the ordinary course of husbandry, was, when last cultivated, cultivated by him, his servant, tenant, agent, or mortgagee, or by some other person holding under him."

† A landholder shall have a permanent, heritable, and transferable right of occupancy in his land, subject only:—

- "(a) to the payment of all such revenue, taxes, cesses, and rates as may from time to time be imposed in respect of such land under any law for the time being in force;
- "(b) to the reservation in favour of Government of all mines and mineral products and of all buried treasure, with full liberty to work and search for the same, paying to the landholder only compensation for surface damage as estimated by the Revenue Officer."

The right referred to in (b) is that of grantee, and is defined in No. 3 of the Rules under the Act.

44. The two kinds of rights, namely, landholder and grantee, although alike in many respects, are nevertheless quite distinct,—

(a) because they differ in origin.

The landholder acquires his right by a continuous possession for 12 years, coupled with a regular payment of revenue, unless expressly exempted therefrom. The grantee acquires his right by direct act of the State.

(b) because they differ in the privileges which they carry and in the liabilities which they entail. The privileges and liabilities of the landholder are defined in the Act. Those of the grantee depend on the terms of his deed.

45. These being the only two kinds of ownership in land distinct from the general right of the State, they must be separately shown on the record.

46. The register of holdings prepared by the Settlement Officer is merely a statistical return which shows the number of years land has been occupied and the different tenures under which it is held. In preparing this register the Settlement Officer should avail himself of the information afforded by the annual register of the circle, and he should make the inquiry in presence of the *thugyi* of the circle and of all the cultivators of the *kwin*. The entries made in this register are not evidence of title in a Court of law, but they will eventually become useful evidence of possession after the lapse of many years.

47. In case of any disputes arising as to the title to land, the Settlement Officer * should invite each party claiming the land to apply for a declaration of landholdership under the Burma Land and Revenue Act. The Settlement Officer, after due observance of all the formalities laid down in the Act, should proceed to take all evidence produced before him which he thinks necessary to call for, and should then record a declaration, stating that the plaintiff or defendant has acquired the status of landholder. The name of the party in whose favour the declaration has been made should be entered in the register provided for the purpose (Appendix I, Register III). All entries made in this register are binding in Civil Courts and can only be altered by an application made to the Revenue Officer under the provisions of the Burma Land and Revenue Act.

48. Possession of land in landholder-right and possession of land in grantee-right are then the only two proprietary tenures. The only other tenures upon which, under the law, land can be held direct from the State are occupation under lease and temporary occupation. These are non-proprietary.

49. Occupation under lease is the occupation of a person whom the State has, through its Revenue Officer, permitted to hold a certain area of land for a stated number of years on condition of payment of revenue only, or of both rent and revenue. The lands which may be the subject of lease are described in sections 12 and 18 of the Act; and the conditions of lease are laid down in the rules issued under the Act.

Section 12 of the Act refers to the lease of such lands as have been volun-

* Settlement Officers are empowered, under section 15 of the Burma Land and Revenue Act, by notification No. 5, dated the 6th October 1879.

tarily relinquished by landholders whose rights to re-entry within 12 years are reserved.

Section 18 refers to other lands which may be leased. It is to be noted that the term "lease" as used in the Act is solely applicable to the letting of land by the State. Act II of 1876 contains no provisions regarding leases made by landholders or grantees to other persons. These fall under the ordinary civil law. The holders of such leases are here classed as "tenants" to distinguish them from "lessees," who are persons holding by lease from the State.

50. Temporary occupation is the occupation of a person, not being a grantee or lessee, whose possession has not fulfilled the conditions laid down in section 7 of the Act. Such occupation may be either—

- (a) without the sanction of the State, *i.e.*, squatting; or
- (b) with the sanction of the State, as contemplated in section 19 of the Act and provided for in the rules under the Act.

51. The number of years during which the temporary occupant has been in possession should be accurately recorded.

52. In accordance with the directions and explanations contained in the preceding paragraphs, the following nine registers should be drawn up for each *kwin*:—

- (a) REGISTER No. I.—Holdings.
- (b) (SUBSIDIARY) REGISTER No. II.—Abstract of uncultivated and excluded lands.
- (c) REGISTER No. III.—Declarations and decisions under sections 15 and 17 of the Burma Land and Revenue Act.
- (d) REGISTER No. IV.—Grants.
- (e) REGISTER No. V.—Leases.
- (f) REGISTER No. VI.—Tenants.
- (g) REGISTER No. VII.—Grazing-grounds.
- (h) REGISTER No. VIII.—Garden and miscellaneous cultivation;
- (i) REGISTER No. IX.—Soil classification.

These nine registers should be in the forms given in Appendix I.

Register No. 1, of Holdings.

53. This is the principal of the four, and is the basis for every other record which may be framed. It should be a faithful picture of the *kwin* for the year of settlement.

54. The register consists of 20 columns and is concerned with the cultivated area of the *kwin*.

55. *Column I.*—For the purposes of the register, "holding" means the aggregate of the fields or other divisions of land contained within a continuous boundary, the land revenue (if any) upon which is assessed in one sum of money.

This definition requires—

- (a) continuity of boundary, *i.e.*, compactness;
- (b) assessment in *one sum*, *i.e.*, possession or occupation by one person or by a number of persons jointly.

"Field" includes cultivated land of every description, fallow land, and land occupied for cultivation, but not yet cultivated, as, for instance, an uncultivated part of a grant.

56. Grants known as grants under the Waste-land Rules of 1839-41, 1865, and 1863 are now to be separate *kwin*s, and not "holdings." Therefore each such grant should be treated as a *kwin* for the purposes of the register and should be distinguished from other *kwin*s by being styled a "grant *kwin*."

57. The great difference between a grant *kwin* and an ordinary *kwin* is that, whereas in the latter there may be several kinds of proprietary rights, in the former there can be only one, namely, that of the grantee or person deriving from him. All who hold land under the grantee in a grant *kwin* are tenants.

58. If a landholder, or grantee, or person in temporary occupation has mortgaged or rented out any part of his holding, the name of the mortgagee or tenant should appear in column 4, and a note should be made in column 20, specifying the fact and the terms of mortgage or rent.

59. Columns 5 to 12 are for the areas held under the various kinds of tenure. These areas should be in acres and decimals of an acre. The entries in these columns should be taken from column 8, Form I, Appendix III, in which the number of years of occupation is noted by the Settlement Officer personally.

60. Column 12 is intended to show any kind of tenure, such as *taungya*,* not included under the preceding columns.

61. "Cultivated" land includes both cultivated and fallow.

"Paddy" land means land actually under paddy or habitually bearing paddy when cultivated.

"Miscellaneous" means land growing any field crop (i.e., not garden, orchard, or fruit tree land) not being paddy.

"Garden and orchard" mean enclosed lands bearing pineapple, betel, cocoanut, plantain, and the like.

62. *Register of uncultivated and excluded lands*.—All lands not entered in Register No. I must be entered in this register (No. II).

"Grazing" includes only that land actually set apart for grazing purposes.

"Village-site" includes only that land actually set apart as such.

"Tree and bush jungle" and "grass jungle" mean blocks of which the greater part (three-fourths) is covered with tree, or bush, or grass, as the case may be.

"Under water" includes land under water all the year round, such as streams, creeks, lakes.

Register of Grants.

63. This register is not intended, as before explained, to show grants under the old Waste-land Grant Rules of 1839-41 and 1863-65, but those made under the rules issued under Act II of 1876 and the ordinary Revenue Rules in force before that date (published at page 143, Fryer's Hand-book).

* Tracts of shifting hill cultivation.

The waste-land grants are, as already explained, now constituted separate *kwin*s.

Register of Leases.

64. The term "lease" has been already defined (paragraph 49).

Columns 4 and 5 are important, as they concern land in which the right of re-entry is conditionally reserved to the relinquishing landholder.

Register of Tenants.

65. This is an important statement. It is essential that the Government should be in possession of accurate information regarding the tenant classes. This is not a record of rights, but is required for administrative and statistical purposes.

It is believed that in the majority of cases the tenant pays for the occupation of the land in two items, namely,—

- (a) the Government revenue in money, either directly through the *thugyi*, or to the person under whom the tenant holds;
- (b) a certain proportion of the produce on the area occupied, and which is the rent proper, to the person under whom the tenant holds.

Register of Grazing-grounds.

66. The Settlement Officer will have columns 1 to 5 of this register filled in for all lands which he considers should be reserved as grazing-grounds.

The other registers prescribed explain themselves sufficiently and call for no remarks.

Supplementary Directions regarding the Preparation of the Record.

67. For the field-work the Settlement Officer should have a staff of holding-markers under inspectors. The duty of these men should be to mark off the boundaries of holdings on the maps.

68. The following points in connection with the registers must be carefully attended to:—

- (a) The registers are to be drawn up in the Burmese language.
- (b) The areas are to be shown in (Burmese figures) acres and decimals of an acre, not in acres, annas, and pies. The conversion of the former into the latter can be readily made, if necessary.
- (c) The Register No. I should, for convenience, be bound up. There should be one volume for each *kwin*—half of the columns on one page, half on the other—so that on opening the volume at any place the entire form should appear, the first part on the left, and the second part on the right hand side. The pages should be sufficiently long (*i.e.*, from top to bottom) to contain, without crowding, 30 entries and their totals, with a margin for corrections and additions. The number of pages in each volume will, of course, depend on the area of the *kwin* and extent of cultivation.

- (d) No page should contain more than one holding, or part of one holding, unless where holdings are very small.
- (e) The order in which the entries should be made is as follows:—
- (i) all the paddy cultivation;
 - (ii) all the miscellaneous cultivation;
 - (iii) all the garden and orchard cultivation in the *kwin*;
 - (iv) all the fruit trees.

The paddy holdings are, generally, all clustered together in the body of the *kwin*; the "miscellaneous," "orchard and garden," areas are confined, as a rule, to the higher land near the village-site, separate from the paddy area; so that the above order is the most natural, as well as the most convenient, and will allow of the total area of each kind of cultivation being shown in one single compact amount.

69. When it has been determined to start work in a number of *kwins*, the cultivators in each should be required, by written notice, to be in readiness to accompany the holding-marker, on a specified day, to point out their holdings.

70. Each holding-marker, on being told off to a *kwin*, should be furnished with the map of the *kwin*, a blue-and-red pencil and a black pencil, and he should have the forms prescribed in Appendix III.

71. On arriving at the village, he should start with the paddy holdings, working round them in such an order as to bring him, on completing them, to the lands (miscellaneous and orchard and garden) next to be entered.

72. The holding-marker should request each cultivator to walk round his holding, in the presence, if possible, of the cultivator of the adjoining holding, and should line off the holding boundary in blue pencil as he progresses, closing in upon the point where he began. If any part of the boundary between two holdings is disputed, the holding-marker should mark off the disputed area on the map, and make a note of the fact for the orders of the Settlement Officer.

73. Whenever the holding-marker finds lands, hitherto regarded as a single holding, now held in separate parts by different individuals, he should show each part as a separate holding, whether the partition has been formal or private.

74. Wherever a fallow field occurs, the holding-marker should mark it by a blue pencil cross in the centre. Should the holding be so large that he cannot see every field as he goes round it, he should request the cultivator to point out to him any fallow fields there may be, and, after identifying them on the map, mark them in the way indicated.

75. After the holding has been completely lined off on the map, the holding-marker should write down in blue pencil, in the centre of the holding, the name of the person in possession, his father's name, if he is a bachelor, his wife's name if he is married, adding the name of any tenant or mortgagee there may be.

76. If only part of the holding be occupied by a tenant or mortgagee, the holding-marker should show the boundary of the area so occupied by a dotted blue pencil line, and should make a note of the fact.

77. If the holding-marker finds any error in the map, such as the blending

of two fields in one, omission of a field, incorrect delineation of a boundary, or such like, he should roughly correct it on the map in red pencil, and make a note, in a form which will be supplied to him, of the details of the error.

78. On completing the paddy holdings, the "miscellaneous," "garden and orchard," lands should be successively taken up in the same way. The holdings in these will generally consist of single fields, or, at most, probably, of couples of fields. The same method of marking should be maintained.

79. The "uncultivated" area will come last, and is not likely to offer much difficulty, as, except in a few cases, the Government is "in possession," and the waste land will probably be found already blocked off on the map according to its natural features. When, however, the holding-marker finds two or more of the descriptions of uncultivated land included within a single boundary on the map, he should roughly mark off the dividing line in red pencil, and make a note in the error list.

80. In *kwins* protected by the embankment the holding-marker must mark off the land which could be cultivated before the embankment was made. He will draw a blue line on the back of the trace, between such land and the land which has become cultivable since the embankment was made. In *kwins* in which part of the land regularly cultivated before the embankment was made has since become uncultivable owing to flood, such land will be similarly marked off.

81. When all is complete, the holding-marker should mark with blue paint all the work done in blue pencil except the names of occupiers of land, sign his name at the foot of the map in ink, report to the Inspector, and deposit the map and error list with him. The names of the occupiers should be entered in ink after the Settlement Officer has checked the lists and made the necessary entries in column 8, Form I, Appendix III.

82. The rate of a holding-marker's progress will depend chiefly on the amount of cultivation, the size of holdings, amount of waste, and nature of the country. The Settlement Officer will soon be in a position to determine how much should be got over daily, and to issue instructions accordingly. Great haste in work of this kind should be avoided.

83. It should be the special business of the Inspector to check, by personal local inspection, the work of the holding-markers. Not less than 25 per cent. of the original entries should be tested by him on the spot; and *all exceptional* entries, such as mortgages of parts of holdings, separation into parts of a holding hitherto recorded as single, and the like, should be checked by the Inspector. Errors should be corrected by him in red pencil, and he should make a list of all errors discovered for the information of the Settlement Officer.

84. When the Inspector has completed his check, he should sign the map and make it over to the Settlement Officer.

85. After receiving the map from the Inspector the Settlement Officer should fix a day for the attendance of the cultivators of the *kwin*.

86. When all are before him, he should proceed to determine and record the tenure upon which each cultivator holds.

87. During the inspection (Chapter V) which he will make of a *kwin*, the Settlement Officer should invariably personally test a few of the entries

in the map. The opportunity will also be a fitting one for selecting, in consultation with the cultivators, the village grazing-ground.

88. If there are any errors in the maps to be rectified, the procedure laid down in paragraph 14 is to be adopted.

89. When the record of tenures is completed, the papers should be made over to the record department of the office for entry of the holdings in Register No. I. If the traces require to be sent for revision survey, they may be sent either before or after the tenures are recorded, as may be found most convenient.

90. The record department of the settlement office should ordinarily consist of clerks, who should work in pairs or singly as found convenient. If they work in pairs, one clerk should read off the field numbers from the map while his partner transcribes them to the register. Then the two should change places, the former writing down in the register the field areas which the latter reads out from the area statement. The field areas should, for convenience of reference, be entered, in the first instance, in column 13 of Register No. I.

91. If any cultivator be found to have two or more holdings in the same *kwin*, these holdings should be entered under consecutive serial numbers in the register.

92. When the paddy-holdings have been completed, the entries under "miscellaneous," "garden and orchard," "fruit trees," should be made. The recording clerks should then sign the register.

93. (Subsidiary) Register No. II should afterwards be prepared in the same way.

94. The work of the recording clerks should then be carefully checked, under all its heads, by a separate staff, who should work in the manner prescribed in preceding paragraph 90.

95. When the Settlement Officer has completed his entries in Register No. I, he should have the remaining registers mentioned in paragraph 52 prepared.

96. When all the registers are completed, the areas in the tenure columns of Register No. I should be totalled up. The entries should then be compared with those, if any, which correspond in the grant, lease, and tenant registers. All four registers should then be indexed, sealed with the office seal page by page, signed by the Settlement Officer, and deposited.

97. The staff employed in preparing the record under this chapter will also serve for the preparation of the soil registers which will be drawn up after the Settlement Officer has completed the inspection prescribed in Chapter V. The same method of check should be maintained throughout.

Record of Customs and Village History.

98. During preparation of the record of rights and occupation in land the opportunity should be taken to obtain from the people a statement of prevailing customs, such as the customs,

(a) in regard to succession to and sale or alienation of land;

- (b) in regard to joint occupation of land by members of a family or otherwise;
- (c) in regard to boundaries of conterminous holdings, the right to the *Kazin** between two holdings, and priority in taking up waste land;
- (d) in regard to partition of holdings;
- (e) in regard to tenant occupancy of land; the rights and liabilities which by custom attach to such occupancy;
- (f) in regard to the appropriation of timber and other spontaneous products on the waste;
- (g) in regard to solitary fruit trees;
- (h) in regard to rights-of-way over fields;
- (i) in regard to cattle-grazing on the *Kazins* and on the waste, and cattle-paths generally;
- (j) in regard to headship (*Ywalugyi*) in the village; whether succession to headship is elective or hereditary, and what functions and privileges are customarily exercised by headmen;
- (k) in regard to the maintenance and repair of pagodas, *kyaungs*,† and other religious buildings, *zayats*,‡ bridges, wells, and roads.

Any other matters worthy of note which may occur to the Settlement Officer in his intercourse with the people should also be noted. Everything which is of general importance to them is worthy of a place on the record.

CHAPTER V.

INSPECTION AND CLASSIFICATION OF THE LAND.

99. Under this chapter fall all the processes undertaken by the Settlement Officer during the field season for obtaining data upon which to base proposals for assessment.

100. The subject divides itself into two branches—

- (a) the classification of the land;
- (b) the collection and application of statistics.

I.—The Classification of the Land.

101. It has been the practice heretofore to regard each *kwin* as consisting of only one kind of soil of uniform quality and to assess it at one rate. In some districts each circle is assessed at one rate throughout.

102. The object of a sound system of assessment, which should be kept in view in the classification of the land, is fourfold:—

- (a) that each cultivator shall pay, approximately, an equal proportion of the produce of his holding;
- (b) that each cultivator may enjoy, approximately, an equal rate of profit from his cultivation;
- (c) that thereby the cultivation of both bad and good land may be rendered profitable;

*The *Kazin* is the bank of earth which separates one field from another in land under paddy-cultivation.
 † Monasteries. ‡ Public Rest Houses.

- (d) that in this way the land revenue may be rendered elastic, capable of steady growth with the increasing prosperity.

103. The method of classification adopted should have the three following characteristics:—

- (i) it should take account of all matters which affect the value of land;
- (ii) it should, in so far as possible, be in harmony with the ideas of the people;
- (iii) it should be susceptible of application in all future revisions of assessment.

104. The main factors in the value of land are—

- (a) amount of produce;
- (b) value of produce.

The object of classification is to exhibit clearly the inequalities under these two heads subsisting between different lands.

105. The first thing, therefore, which the Settlement Officer should endeavour to ascertain is whether the country upon which he is about to operate can be considered as a homogeneous whole or whether there are any broad and marked differences subsisting between parts of it which necessitate a division into two or more assessment tracts.

106. There are several matters which should determine the Settlement Officer in this primary or tract classification, among which are the following:—

- (a) marked differences in density of population and size of holdings;
- (b) important differences in the kinds of produce raised, due to climate, physical character of the country, or other causes;
- (c) important differences in facilities for transport to market and disposal of produce.

107. Should the Settlement Officer find reason to divide the country into two or more assessment tracts, he should carefully note the causes and the measure of the difference between them.

108. Each of the tracts into which the Settlement Officer may, in accordance with the foregoing instructions, have divided the country, contains a certain number of *kwins*. Lists of the *kwins* within each tract should be drawn up, and on each *kwin*-map and register should be inscribed the name of the tract within which it falls. This process completes the first or tract classification.

109. The next process is the classification of the lands within each *kwin*. This may be done in the first place by Inspectors, but the Settlement Officer should carefully check the work. He should as a rule go over every *kwin* himself, but he may occasionally pass by a *kwin* in which the area under paddy-cultivation is small as compared with the total area.

110. In the monthly statement of progress of work (Appendix IV, Form No. I) the Settlement Officer should note the number of *kwins* which he has personally checked and of those in which the soils have been classified by Inspectors only.

111. A *kwin* is a compact area of land frequently enclosed within natural boundaries. Each assessment tract being a homogeneous block of country, it follows that all the included *kwins* will have certain characteristics in common, among which that of soil is the most important. Each *kwin* will be

found to contain one or more of certain classes of soil common to the tract. But these classes of soil will be found distributed in varying proportions in each *kwin*. In this varying proportion of good and bad soil consists the difference for assessment purposes between the *kwins* of any one tract.

112. The internal classification of *kwins* is, therefore, simply a division of the land into blocks according to manifest varieties of soil.

113. Excessive minuteness in soil divisions is not desirable. The end in view is, not to make a perfect analysis of the soil varieties within each *kwin*, but to exhibit faithfully such differences only as are at the present time taken account of by the people themselves. The Settlement Officer's classification should not be in advance of the people's classification for cultivation, or that of the market for sale or purchase.

114. The object is, as explained in paragraph 25, Chapter III, to divide the *kwin* into blocks whereof the fields are so far similar in natural quality that one average rate of productiveness may be assumed for each entire block without fear either of much over-estimating or of much under-estimating any one part of it.

115. A division of the land into two soil classes, first and second, will, in the present state of cultivation, and at the present value of land, probably be found sufficient. But, as pointed out in preceding paragraph 103 (ii), the Settlement Officer should be guided by the ideas of the people. In illustration of this principle, let it be supposed that the Settlement Officer has arrived at a *kwin* adjacent on one side to a *kóndan*, or ridge of elevated land. According to a natural law, the *kóndan* must have some basin into which the moisture which it cannot retain is drained. The Settlement Officer will probably find that there is a dip in the *kwin* along the line of boundary between it and the *kóndan*, and that as the lands recede from the *kóndan* they rise in level till they reach a plateau, from which the configuration of the country takes a new departure. In such a *kwin* there would be two great blocks of soil of differing quality,—the deep, low clay of the basin, and the lighter, more denuded clay of the slope. The exact line of separation of the two cannot be determined with precision. No two persons would probably fix the same line; but the principle laid down in paragraph 114 will be a safe guide.

116. Uniformity in demarcating soil blocks is of great importance. The Settlement Officer should be able after a little experience to fix in his mind the extreme limit of soil variety which should be allowed to appear in any one block. He should be able to lay down for his own guidance the general *locus* of the line dividing any two soils which gradually blend into each other. Having once fixed this, he should adhere to it throughout his entire inspection.

117. No precise description of the soils which may be met with can be here given, but clay of varying consistency is the principal, alternating of course with light loam and mixed sandy soils on the *kóndans* and hilly tracts. The Settlement Officer will, as the range of his inspection widens, be able gradually to bring the chief soil varieties into classes and name them. His tendency at first will be to unduly multiply classes. Over-refining should, however, be avoided. Experience will teach him what minor varieties to group under a common name.

118. The soil classifications made during detailed inspection should as a rule be confirmed by the results of the crop-cutting. In Chapter III the Settlement Officer is required to select areas from each of the great varieties of soil. The statistics of out-turn in each class should be compared with the rank independently assigned to that class; and, if due care has been observed, the results of the comparison over a large area should be confirmatory of the final classification.

119. Each soil block in a *kucin* should be marked off on the *kwin* map with a pencil and the name of the class written down on the centre of the block. This should ordinarily be done on the same copy of the map on which the holdings were marked off in order that it may be seen at a glance how the holdings share the various kinds of land and in order to facilitate the transcription from the map to the assessment registers of the areas of each description of land within each holding.

120. When this has been done, the classification of the entire tract is complete. In each *kwin* the blocks of similar soil have been marked off, and their areas ascertained. For each block an average rate of productiveness (Chapter III) has been deduced. It now remains to determine a value-rate for each kind of soil and from it an assessment rate.

II.—The Collection and Application of Statistics.

121. The object sought in the collection and tabulation of statistics is the formation of a series of data from which the assessment rates on the various soil classes may be deduced.

122. The statistics which in addition to those (Chapter III) of out-turn of crop are indispensable are those relating to local values of produce and cost of cultivation.

123. The value of paddy is at present determined by its export price. Ordinarily, therefore, the local market-rate would be equal to the export-rate *minus* the rate of cost of carriage to the export market. But owing to the cultivator disposing of his produce to middlemen this theoretical rate may not correspond with the actual rate. Where a difference occurs, the Settlement Officer should note it and find the explanation. The Settlement Officer should choose as his basis of assessment the actual average local prices during the three months after harvest.

124. In the primary tract classification described in the first part of this chapter the Settlement Officer will have grouped together those *kwins* which have similar facilities for transport of their produce to market. He will probably be able, therefore, to deduce one average scale of local value for each tract.

125. The inquiry regarding cost of cultivation is not so simple and should be conducted by the Settlement Officer himself. The cost of cultivation is known to vary considerably in different parts of the country and among different classes of the people.

126. In order to arrive at a fair average scale of cost of cultivation it is necessary that the higher and lower limits of this cost as well as the circumstances under which they are incurred be ascertained. No effort should be

spared to obtain as large a number of cases as possible from among all classes of the people and over the entire area of the country under settlement. The information should be brought under the heads given in Statement II of Appendix II.

127. It is important that these statistics should be taken by entire *kwins* and not from a few isolated cases. The number of the *kwins* in which it will be necessary to collect these statistics may be left to the discretion of the Settlement Officer.

CHAPTER VI.

PRINCIPLES OF ASSESSMENT AND SETTLEMENT.

128. It now remains to determine the rates at which the soil classes within each tract shall be assessed, which rates, by a simple process of multiplication, will determine the assessment of each holding.

129. The general law in regard to assessment is contained in Part III, section 23,* Act II of 1876.

All cultivable land is liable to assessment, subject to the exceptions described in section 23 of the Act.

130. The law regarding the mode and amount of assessment is contained in section 24 of Act II of 1876.

131. The fundamental principle of land revenue assessment is that, according to the ancient custom of the country, Government is entitled to a share of the produce of the land from time to time to be fixed by itself. The exact share to be taken is a question to be settled for each tract according to the circumstances of the case.

132. The Government share of the produce must be assessed in cash at a fixed amount per acre for each class of soil for a term of years.

133. The principle upon which the rates are now to be fixed is that they shall represent a proportion of the net produce of the soil.

134. The net produce of the land means the balance of the gross produce after deduction of the cost of cultivation.

The cost of cultivation will be calculated per acre on the basis of the average local rates for hire of labour, hire of cattle, cost of seed, and the like. Hiring will be allowed for in the estimate to the extent to which the resident cultivator ordinarily supplements his own labour and that of his family and plough cattle by hired labourers or cattle. In the cost of cultivation should be included depreciation of implements and farming stock, and everything

* Section 23 of the Act enacts as follows:—

Land liable to land revenue assessment. "23. All cultivable land and all land which is cultivable when this Act comes into force, but which subsequently becomes uncultivable in consequence of the erection of buildings or otherwise by the act of man,

"And all land assessed to land revenue when this Act comes into force,

"Shall be liable to be assessed to land revenue in manner hereinafter mentioned.

"But nothing in this section shall apply to—

"(a) land which, when this Act comes into force, belongs to the site of any monastery, pagoda, or other sacred building, or of any school, and which continues to be used for the purposes of such monastery, pagoda, building, or school;

"(b) land exempt from assessment under the express terms of any grant made by or on behalf of the British Government;

"(c) land in respect of which a *tasweya* tax is imposed under section 33;

"(d) land appropriated to the dwelling-places of any town or village, and exempted from the operation of the former part of this section by order of the Chief Commissioner, which order the Chief Commissioner is hereby empowered to make from time to time."

else which can fairly be debited to this head, the cost of living of the cultivator and his family, however, being excluded.

135. The standard proportion of the net produce to be taken by the State in Burma as land revenue is one-half, but for the present the rates in Lower Burma will be framed with reference to the rates previously existing, and will ordinarily for this reason approximate more nearly to one-quarter of the net produce than to one-half. In this sense one-quarter of the net produce may be regarded as the provisional standard, but not so as to prevent rates exceeding this proportion, but not exceeding one-half of the net produce from being imposed, if they are otherwise warranted by the circumstances of the tract.

136. Before proposing rates for sanction the Settlement Officer should consider the following points:—

- (a) Incidence of the present revenue.
- (b) Amount of the present revenue.
- (c) Rents paid by tenants.
- (d) The value of the produce which can safely be assumed for the term of settlement.
- (e) Average size of the holdings of the agricultural families.
- (f) The average cost of living of the agricultural families.
- (g) The margin of waste left for increase of cultivation.
- (h) The general condition of the people.
- (i) Probable effects of increase of population ascertained by a consideration of the changes wrought by increase of population in the past.

137. The Settlement Officer when proposing his rates should compare them with:—

- | | | |
|-------------------|--|---------------------------|
| (i) tenant rates; | \| | (ii) gross produce rates; |
| | | (iii) net profit rates. |

N.B.—Net profit means the balance of the gross produce after deduction of the cost of cultivation and also of the cost of living.

138. The Settlement Officer should also compare his proposed rates with rates deduced by means of the provisional standard, and should state clearly his reasons for considering his rates more suitable for the tract than the latter.

139. It is of primary importance that no such enhancement of rates should be made as will impose on the people the necessity of lowering their standard of living or curtailing their common comforts. No people can be expected to live contentedly under burdens which impose such a necessity.

140. Large families cultivating small holdings cannot ordinarily afford to pay so much as small families cultivating large holdings; and under existing conditions, cultivators in tracts where the limit of cultivation has been reached, or nearly reached, run more risks than those cultivating in parts of the country where there is ample waste still available.

141. Nowhere would the effects of any real disturbance of the equilibrium of taxation be felt more keenly or be more mischievous than in Burma. The stability of this equilibrium must depend in great measure upon the pressure of the land revenue. Due weight, therefore, to all the considerations above described is indispensable in order to secure a just assessment.

CHAPTER VII.

REPORT OF PROPOSALS AND RESULTS.

I.—The Report.

144. The report should be brief. It should contain five chapters, as follows:—

CHAPTER I.

GENERAL DESCRIPTION OF THE COUNTRY.

- (a) Physical features.
- (b) Races of the people.
- (c) Occupations of the people.
- (d) Modes of agriculture; liability of floods, drought, or other disaster.
- (e) Grazing-grounds.
- (f) Fisheries.
- (g) Communications by land and water.
- (h) Towns and large villages, chief export markets.
- (i) Principal products.

CHAPTER II.

GENERAL CONDITION OF THE PEOPLE.

- (a) Total population; density per square mile; distinguishing between agricultural and non-agricultural.
- (b) Average number of cultivating family.
- (c) Standard of living; habits, indebtedness, or otherwise; vocation and condition of non-agriculturists.
- (d) Area of cultivation and of waste.
- (e) Average area of holding, distinguishing between paddy-holdings and orchard, garden, miscellaneous holdings.
- (f) History and description of any waste-land grants made under the old rules * which may exist within the area under settlement; comparison of their original and present areas; statement of progress made in cultivation and of the relations between the grantees and their tenants and the cultivators of the surrounding country.
- (g) Sketch of the condition, past and present, of the tenant classes, with number, area held, and rent paid.

CHAPTER III.

PAST ASSESSMENTS AND FISCAL HISTORY.

- (a) Amounts of previous assessments; rates fixed at each assessment.
- (b) Methods adopted at previous revisions of rates.
- (c) Amount of expiring assessment; current rates; total incidence of assessment per acre; facility or difficulty in collection.
- (d) Former and present market values of land as ascertained from sale and mortgage transactions.

* 1839-41 (Arakan) and 1863-65 (Pegu). Sale of Waste Lands, 1863.

CHAPTER IV.

PROGRESS OF THE COUNTRY SINCE LAST REVISION OF RATES.

- (a) Former and present cultivated area; causes of increase or decrease.
- (b) Former and present population; causes of increase or decrease; progress of immigration.
- (c) Areas held under the various kinds of tenure and number of tenure-holders of each class.
- (d) Former and present rates of productiveness per acre.
- (e) Former and present average holding areas; causes of increase or decrease.
- (f) Former and present prices of produce; causes of rise or fall.
- (g) General condition of the people now as compared with the period of last revision.

CHAPTER V.

PROPOSED ASSESSMENT RATES.

- (a) Assessment tracts (if any) into which the country has been divided: statement of difference between them and measure of this difference.
- (b) Average area of the holding in each tract.
- (c) Statement and description of the classes of soil and of garden or other cultivation (Chapter III, paragraph 33) adopted in each tract.
- (d) Gross productiveness per acre deduced for each class of soil and of garden or other cultivation (Chapter III, paragraph 34).
- (e) Local value (per 100 standard baskets) of paddy and garden or other produce adopted for each tract.
- (f) Cost of living of the agricultural family per acre of average holding.
- (g) Cost of cultivation per acre of the average holding.
- (h) Statement of rates on the soil classes in each tract based on the standard or provisional standard of assessment and method of working them out.
- (i) Rates finally proposed with reasons for differences in the way of excess or defect from rates resulting from the provisional standard, and comparison with rates of revised assessment in adjoining circles.
- (j) Comparison of incidence of tenant rents per acre with the rates shown under clause (h) and with the rents finally proposed.
- (k) Comparison of current *kicin*-rates with proposed rates.
- (l) Resulting total assessment at proposed rates, (1) without 10 per cent. cess, (2) with 10 per cent. cess.
- (m) Difference between the proposed and the expiring assessment, (1) without cess, (2) with cess.
- (n) Difference between the incidence of the proposed assessment per acre and that of the expiring assessment, (1) without cess, (2) with cess.

- (o) Explanation of how much of the difference is due to area and how much to change of rate.

145. The appendices should be in the prescribed forms, which sufficiently explain themselves.

146. The report in manuscript should be submitted to the Settlement Commissioner not later than the 31st October. The report will be printed under the superintendence of the Settlement Commissioner and proof copies will be sent to the Commissioner and the Deputy Commissioner.

147. The report will then, on a date to be fixed, be considered in Committee by the Commissioner, the Settlement Commissioner and the Deputy Commissioner, and one review embodying the views of the Committee will be written by the Settlement Commissioner. The Settlement Officer will be given the opportunity of supporting his proposals before the Committee when necessary.

The report with the review will then be submitted to the Local Government through the Financial Commissioner as soon as possible.

CHAPTER VIII.

THE RECESS.

148. The Settlement Officer's field season begins on the 1st October and ends on the 31st May. The recess, which begins on the 1st June and ends on the 30th September, will be devoted chiefly to office work.

149. The Settlement Officer's business during the recess will consist of the following:—

- (a) preparation of assessment rolls;
- (b) preparation of settlement registers mentioned in paragraph 52, and deposit in the district revenue office.

150. The Registers I, II, III, IV, V, VI, VII, VIII, IX, are to be permanent records of the era of settlement. They embody a series of facts in regard to the land and its occupation which are to be the groundwork of future statistics and registration. It is necessary, therefore, that they should be preserved in a form suitable for easy and rapid reference.

151. Such of the original registers prepared during the field season as are in good condition, sufficiently legible, and free from alterations and erasures, need not be fairied. But all originals which are the worse for wear, and which bear numerous corrections and erasures, should be fairied out.

152. In cases in which the Settlement Officer considers that fairing is unnecessary, he should be careful to attach his initials to every correction and erasure, and to append an *errata* statement indicating the corrections and erasures.

153. Where fairing is considered necessary, the Settlement Officer should see that every entry is accurately and neatly copied; and on completion the fairied copy should be carefully compared with the original. Errors in copying are extraordinarily frequent in Burma: special care should, therefore, be taken in the examination of the final record so as to insure correctness.

154. Every register, whether original or copy, should be signed at the end

by the Settlement Officer, every page should be stamped with the office seal, and the register should be neatly bound in a durable cover.

155. The registers destined for the district record office should, when no longer required, be deposited and a receipt taken from the record keeper.

156. As the *thugyis* are now charged with the maintenance from year to year of registers of changes in the occupation of land, the Settlement Officer is required to prepare the first six columns of Register No. I, annual register of holdings and revenue roll (form given in Directions to Revenue Officers concerning supplementary survey), so as to give the *thugyis* a fair start.

157. The Settlement Officer should fix the scale of his recess establishment after a careful estimate of the amount of office work to be done.

158. A judicious division of labour in the office is indispensable. The staff should be distributed into sections, for each of which certain fixed duties should be appointed.

159. The settlement office during the recess should be either at the divisional or district headquarters. The sanction of the Commissioner should be obtained to whichever arrangement is made, and the Commissioner should report the arrangement sanctioned for the information of the Chief Commissioner.*

160. The Settlement Officer should submit monthly, as soon after the end of the month as possible, to the Settlement Commissioner, through the Divisional Commissioner, his own diary and the diaries of the Assistant Settlement Officer working under him. He should also submit direct to the Settlement Commissioner monthly returns of the progress of work and of expenditure in Forms I and II of Appendix IV.

APPENDIX I.—(Registers.)

Register I.—Holdings.

Register II.—Uncultivated and excluded lands.

Register III.—Declarations and decisions under sections 15 and 17 of the Burma Land and Revenue Act.

Register IV.—Grants.

Register V.—Leases.

Register VI.—Tenants.

Register VII.—Registers of grazing-grounds.

Register VIII.—Garden and miscellaneous cultivation.

Register IX.—Soil classification.

APPENDIX II.—(Statements to accompany Report.)

Statement I.—Crop statistics.

Statement II.—General agricultural statistics.

Statement III.—Soil classification, &c., for (a) each *kwin*, (b) each assessment tract.

Statement IV.—Financial results.

Statement V.—Effect of Government embankments.

* Since 1898 the head of the Province has been a Lieutenant-Governor instead of a Chief Commissioner.
A. I.

APPENDIX III.—(Forms used in Field by Holding-markers and Inspectors.)

Form I.—Paddy-holding marking form.

Form II.—Garden and fruit tree form.

Form III.—Sales.

Form IV.—Mortgages.

Form V.—*Errata* form.

Form VI.—Cost of carriage by cart.

Form VII.—Cost of carriage by boat.

Form VIII.—Difference of basket statement.

APPENDIX IV.

I.—Monthly progress report.

II.—Monthly expenditure report.

APPENDIX I.
SETTLEMENT REGISTER No. I.—Register of Holdings.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Serial No. of holding.	Survey No. of fields in holding.	Name of person in possession, with father's name (if a husband) or wife's name (if married).	Name of person in possession as tenant or mortgagee.	Last held for 12 years and over.		Cultures.	Lands held under lease.	Lands held in temporary occupation.		Other kinds of tenure, such as mortgage.	Total area of holding.	Description of Cultures.				Remarks.			
				Area.	Duration of occupation.			Area.	Duration of occupation.			Paddy.	Temporarily waste-land.	Miscellaneous.	Garden and orchard.		Number of trees.	Kind of trees.	

APPENDIX L

SETTLEMENT REGISTER No. II.—*Abstract of Uncultivated and Excluded Lands.*

1	2	3	4	5	6	7	8	9	10	11
Grating.		Village site.	Monastery, pagoda, reserved building, school.	Road, canal, drain, tank, embankment.	Tree and bush jungle.		Grass Jungle.		Under water.	Remarks.
Culturable.	Unculturable.				Culturable.	Unculturable.	Culturable.	Unculturable.		
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Acres.		Acres.	

APPENDIX I.

SETTLEMENT REGISTER No. III.—*Declarations and Decisions under Sections 15 and 17 of the Burma Land and Revenue Act.*

Page _____ Year _____ District _____ Township _____
 _____ Circle _____ Kwin.

1	2	3	4	5	6	7
Name of person who has received the notice of declaration.	Serial No. of holding in which notice of declaration has been received.	Serial No. of field in holding.	Area of field in holding.	Total area of holding in which notice of declaration has been received.	Explanation of Revenue Officer.	Date of declaration.
			Ass. Dns.	Ass. Dns.		

District _____ Township _____ Circle _____ Kwin. _____

1	2	3	4	5	6	7
AREA UNDER GRANT.						Remarks.†
Social No. of grant.	Name of grantee.	Social No. of holding in Register No. 1.	Total area held under grant.		Approximate area not cultivated.	
			Ass.	Don.	Ass.	Don.
					</	

* The period of exemption from assessment should be reckoned from the commencement of the agricultural year; i.e., from the first July next following the date of the grant.

¹ A note should be made in the column of remarks, stating whether each grant is demerited.

SETTLEMENT REGISTER NO. V.—Register of Leases.

1	2	3	4	5	6	7	8	9	10
Serial No.	Serial No. of holding in Register No. I.	Name of owner.	AREA AND DESCRIPTION OF LAND LEASED.						
			Relinquished by land-holder and taken over by Revenue Officer under section 12, Act II of 1876.						
			Name of land-holder.	Date of taking over by Revenue Officer.	Area according to Register No. I.	Land leased under section 18, Act II of 1876.	Date of lease.	Number of years for which leased.	Remarks.
					Acres.	Acres.			

LAND REVENUE SETTLEMENT

889

APPENDIX L

SETTLEMENT REGISTER No. VII.—Register of Grazing-grounds.

Page _____ Year _____ District _____
Township _____ Circle _____

Serial No. of Jucis.		Area of grazing ground.	VILLAGE TO WHICH ALLGOTTED.		Date of publication of notification under Issue 20 of the Revenue Rules.	Number and nature of permanent marks with which the grazing ground has been demarcated.	Date on which the marks were last examined.	State of repair of the boundary marks.	Remarks.
Circle.	Village.								
1	2	3	4	5	6	7	8	9	10
		Ass. Div.							

NOTE.—Columns 6, 7, 8, and 9 will not be filled in by the Settlement Office, but only after the grazing-ground has been reserved by the Deputy Commissioner.

APPENDIX L

SETTLEMENT REGISTER No. VIII.—Register of Garden and Miscellaneous Cultivation.

[illegible]

APPENDIX II.
STATEMENT No. II.—General Agricultural Statistics.

[illegible]

NOTE.—In the headings of columns 2, 3, and 4 will be entered the names met with in the tract under statements.
 * Followed above and not be included in column 8.
 Columns 20 is found by dividing results set in column 16 by 4.

STATEMENT No. 11.—General Agricultural Statistics (concluded).

[illegible]

APPENDIX II. STATEMENT III.—Statement of Soil-classification, Proposed Rates, and Proposed Demand for Each Treatment Tract — (PAISO-CULTIVATION).

[illegible]

STATEMENT III.—Soil classification, Proposed Rate, and Proposed Demand for Each $\frac{\text{Kiln}}{\text{Assessment Prod}} - (\text{GARDEN-CULTIVATION})$.

[illegible]

THE PROVINCE OF BURMA

APPENDIX II. STATEMENT V.—*Effect of Government Endowments.*

1	2	3	4	5	6	7
Circle.	Key.	Cultivated area not protected by hedgebanks.	Cultivated area protected by hedgebanks.	Land shown not to be included for land surveyed by the authorities.	Total.	Remarks.
		Acres.	Acres.	Acres.	Acres.	

Note.—If there are two or more embankments, columns 4 and 5 should be divided so as to show the effect of each embankment separately.

APPENDIX III. [Forms used in the Field.]

Form L.—*Hodding Marking Form (Paddy).*

District _____ Township _____ Circle _____ Km. _____

Field No.	1
Holding No.	2
Name of owner.	3
Residence of owner.	4
Field No. of section visited by tourist or biographer.	5
Name of tourist (if any visiting).	6
Name of tourist and biographer, who made the haul, or of biographer.	7
Number of years the haul has been completed.	8
Remarks.	9

NOTE.—In columns 1 and 2 enter the No. of some field as shown on the trace. Column 3 to be filled in by the Settlement Officer only.

APPENDIX III.

FORM 11.—Statement of Gardens and Solitary Fruit Trees.

Field No.	Holding No.	Name of owner.	Other occupations.	GARDEN.						MISCELLANEOUS.							
				Mangos.	Cocoanuts.	Bread-fruits.	Plantains.	Dacul.	Mixed fresh fruits.	Orchids.	Bread-vine.	Cass.	Chillies.	Custons.	Bananas.	Vegetables.	Tobaccoes.	Others.	Remarks.

LAND REVENUE SETTLEMENT

895

APPENDIX III.

FORM III.—Sales.

(Note.—Only enter sales during last five years.)

1	2	3	4	5	6	7	8	9
Serial No.	Holding No.	Name of seller.	Name of purchaser.	Area of land sold.	Year of sale.	Price paid.	Price per acre.	Remarks. (Amounts for selling, &c.)
						Rs.	Rs.	

APPENDIX III.

FORM IV.—Mortgages.

1	2	3	4	5	6	7	8	9
Serial No.	Holding No.	Name of mortgagor.	Name of mortgagee.	Area of land mortgaged.	Year of mortgage.	Amount for which mortgaged.	Amount per acre.	Remarks.
						Rs.	Rs.	

APPENDIX III.

FORM V.—Errata Statement.

—District—Township—Circle—Kurin.

Serial No.	Holding No.	Field No.	Nature of error.

APPENDIX III.

FORM No. VI.—Cost of Carriage by Cart.

1	2	3	4	5	6
No.	Name of keels.	Load of a cart.	Elms per cart to river bank.	Rate per 100 baskets to river bank.	Remarks.
		Baskets.	Rs.	Rs.	

APPENDIX III.

FORM VII.—Cost of Carriage by Boat.

1	2	3	4	5	6	7	8	9
Serial No.	Name of keels.	Time spent on the way to the wharves.	Elms of boat.	Capacity of boat.	Cost.		Wages of crew.	
					Stowmen.	Rowers.	Stowmen.	Rowers.
			Rs.				Rs.	Rs.
								Total of columns 7 and 8.
								Rate per 100 baskets.

APPENDIX III.

FORM VIII.—Difference of Basket.

1	2	3						4
Serial No.	Name of keels.	Basket. (a)		Basket. (b)		Basket. (c)		Remarks.
		Boys.	Zells.	Boys.	Zells.	Boys.	Zells.	

APPENDIX IV.

STATEMENT 1.—*Monthly (Field Season) Report of Progress up to* 168 .[illegible]

NOTE.—Attention is called to section 110 of Exemptions.

STATEMENT II.—*Monthly Statement of Settlement Expenditure for* ———— 1888.[illegible][illegible][illegible]

Hahnemann Institute, Pa.

APPENDIX P.

STATISTICS OF LAND REVENUE, OF LAND HOLDINGS, AND OF AGRICULTURAL LOANS

- | | |
|-------|---|
| Table | I. Ordinary Land Revenue: Area assessed, Revenue Demand, Remissions, Collections, and Amount outstanding for the Year ending 30 June, 1905. |
| Table | II. Capitation Tax: Number of Persons assessed, Demand, Remissions, Collections, and Amount outstanding for the Year ending 30 June, 1905. |
| Table | III. Land Rate in Lieu of Capitation: Area assessed, Demand, Remissions, and Collections for the Year ending 30 June, 1905. |
| Table | IV. Water Rate: Area assessed, Demand, Remissions, Collections, and Amount outstanding for the Year ending 30 June, 1905. |
| Table | V. Thathameda: Number of Households assessed, Demand, Remissions, Collections, and Amount outstanding for the Year ending 30 June, 1905. |
| Table | VI. Fishery Revenue: Demand, Remissions, Collections, and Amount outstanding for the Year ending 30 June, 1905. |
| Table | VII. Miscellaneous Land Revenue: Collections for the Year ending 30 June, 1905. |
| Table | VIII. Revenue Proceedings against Defaulters for the Year ending 30 June, 1905. |
| Table | IX. Sales, Mortgages, and Redemptions of Land during the Year ending 30 June, 1905. |
| Table | X. Classification of Occupiers of Land and Details of Tenancies at Full Rents during the Year ending 30 June, 1905. |
| Table | XI. Agricultural Advances during the Year ending 31 March, 1905. |
| Table | XII. Financial Results of Agricultural Advances made and recovered during the five Years ending 31 March, 1905. |

LAND REVENUE

901

TABLE I.

ORDINARY LAND REVENUE: AREA ASSESSED, REVENUE DEMAND, REMISSIONS, COLLECTIONS, AND AMOUNT OUTSTANDING FOR THE YEAR ENDING 30 JUNE 1905.

Division and District.	Area assessed. (In acres.)	Revenue Demand. (In rupees.)	Remissions. (In rupees.)	Collection of Arrears. (In rupees.)	Collection for Current Year. (In rupees.)	Total Revenue outstanding. June 30, 1905. (In rupees.)
Arakan.						
Alayn	756,401	1,657,120	4,065	49	1,652,668	557
Northern Arakan	10,924	7,562	5	—	7,557	—
Kyaukpada	162,439	243,278	1,005	—	240,945	1,328
Sandoway	71,515	113,974	188	4	112,926	860
Pegu.						
Bangon Town	8,500	31,783	—	—	31,783	—
Hanthawaddy	1,205,617	3,475,075	39,549	—	3,435,232	4,303
Pegu	832,574	1,941,605	11,438	19	1,919,569	10,598
Tharawaddy	499,234	1,152,433	5,343	—	1,147,082	28
Prome	349,096	495,725	1,258	—	494,427	40
Irrawaddy.						
Bassein	629,733	1,407,793	1,114	64	1,406,677	—
Myingonyia	589,559	1,515,921	9,702	829	1,504,711	1,508
Maubin	434,264	987,166	25,001	801	959,230	2,835
Pyawbin	562,505	1,401,955	4,936	2,547	1,399,911	6,088
Hamada	531,256	1,249,163	21,694	945	1,225,542	1,927
Tanintharyi.						
Toungoo	321,569	664,160	1,077	78	663,083	—
Salween	23,653	24,838	37	—	24,738	83
Thabin	589,696	1,141,241	56,395	—	1,084,846	—
Anabert	384,875	710,799	82,506	8	618,255	10,038
Tavoy	119,082	216,076	2,432	457	213,294	410
Mergui	98,746	169,838	2,152	127	167,441	245
Monkhe.						
Thayemya	196,276	234,501	410	107	233,148	943
Pakoku	41,474	136,516	64	—	136,452	—
Minbu	234,848	449,781	153	405	449,628	—
Magwe	14,614	53,862	8	468	53,146	708
Monkhe (P.)						
Mandalay	155,898	718,596	11,341	32,083	684,135	23,120
Bhamo	17,702	27,245	—	—	27,245	—
Myittha	—	18,543	173	—	18,370	—
Katha	153,836	200,245	357	—	199,888	—
Ruby Mines	9,403	17,393	191	—	17,132	70
Shan State.						
Shwebo	3,679	23,109	189	1,810	22,980	—
Sagaing	446,233	501,805	436	1,049	499,390	2,009
Lower Chinthe	436,589	312,446	107	—	312,339	—
Upper Chinthe	28,232	79,089	177	—	76,513	2,399
South China.						
Kyaukse	185,194	717,820	3,848	—	713,972	—
Meiktila	298,355	425,627	1,737	—	423,890	—
Yamethin	102,651	158,681	369	1,173	158,249	63
Pyinmana	84,022	188,517	205	423	187,547	565
Myingyan	563,126	472,662	709	—	471,953	—
Total	—	23,343,843	290,414	43,446	22,982,704	70,725

THE PROVINCE OF BURMA

TABLE II.

CAPITATION TAX: NUMBER OF PERSONS ASSESSED, DEMAND, REMISSIONS, COLLECTIONS, AND AMOUNT OUTSTANDING FOR THE YEAR ENDING 30 JUNE, 1960.

Division and District.	Number of Persons assessed.	Demand. (In rupees.)	Remissions. (In rupees.)	Collection of Assessors. (In rupees.)	Collection for Current Year. (In rupees.)	Outstanding, June 30, 1960. (In rupees.)
Arakan {	105,531	443,895	3,743	—	440,148	—
Akyab	4,874	4,874	—	—	4,874	—
Northern Arakan	41,116	172,882	3,801	—	169,081	28
Kyaokpyu	20,943	76,507	2,514	—	73,993	—
Sandoway	122,822	496,294	4,590	—	491,704	—
Burma {	98,546	358,727	2,490	—	356,237	22
Hanthawaddy	87,144	383,153	2,740	—	380,413	—
Pegu	70,420	292,868	2,879	—	290,048	1
Tharawaddy	79,952	352,944	4,217	—	348,727	—
Prom	68,121	277,208	4,789	47	272,469	—
Myingone	41,667	285,085	2,627	—	282,458	130
Ma-abin	35,971	240,508	3,348	—	237,160	—
Pyaw	100,910	449,684	2,397	—	447,287	—
Honnai	58,534	285,167	2,638	5	282,529	—
Toungoo	9,791	20,848	22	—	20,826	—
Salween	77,867	313,315	1,088	—	312,227	—
Thabin	54,787	229,288	1,309	—	227,979	—
Anheri	24,796	99,344	966	—	98,378	—
Tavoy	20,987	78,103	982	—	77,121	—
Mergui	62,747	211,215	834	—	210,381	—
Thayeta	—	23,745	—	—	23,745	—
Railway Co.'s Employees	—	3,932	—	—	3,932	—
Irrawaddy Flotilla Co.'s Employees	—	—	—	—	—	—
Total	1,205,320	5,033,032	48,044	52	4,984,919	189

LAND REVENUE

903

TABLE III.

LAND RATE IN LIEU OF CAPITATION: AREA ASSESSED, DEMAND, REMISSIONS, AND COLLECTIONS FOR THE YEAR ENDING 30 JUNE, 1905.

Division and District.	Area assessed. (In acres.)	Demand. (In rupees.)	Remissions. (In rupees.)	Collections. (In rupees.)
Arakan { Akyab	1,066	7,321	64	7,257
{ Kyaukpadaung . . .	311	2,098	33	2,065
Pegu Frome	1,743	19,292	14	19,278
Irrawaddy { Bassein	784	19,861	145	19,716
{ Henzada	3,135	22,763	201	22,562
Tenasserim { Taungtha	321	11,678	141	11,537
Minbu Thabeikkyin . . .	292	9,648	39	9,609
Total	7,652	92,661	637	92,024

TABLE IV.

WATER RATE: AREA ASSESSED, DEMAND, REMISSIONS, COLLECTIONS, AND AMOUNT OUTSTANDING FOR THE YEAR ENDING 30 JUNE, 1905.

Division and District.	Area assessed. (In acres.)	Demand. (In rupees.)	Remissions. (In rupees.)	Collections for current year. (In rupees.)	Outstanding. June 30, 1905. (In rupees.)
Sagaing { Shwebo	21,366	27,750	26	27,724	426
{ Sagaing	1,320	2,693	2	2,691	30
Meiktila { Kyaukse	400	1,550	—	1,550	—
{ Meiktila	59	166	—	166	—
{ Yamethin	—	—	—	—	—
Total	23,145	32,159	28	31,695	456

TABLE VII.
MISCELLANEOUS LAND REVENUE COLLECTIONS FOR THE YEAR ENDING
30 JUNE, 1905.
(IN RUPEES.)

Division and District.		Rent of Town Lands not included in Local Funds.	Fees, Rents, and Royalties.		Rozzols under the Village Act and Village Regulation.	Survey Fees for Patna.	From Other Sources.	Total Miscellaneous Land Revenue.
			On Petroleum, Indian, Jute, and Amber.	On Other Minerals.				
Arakan.	Akyab	373	1,287	337	5,952	357	169	8,473
	Northern Arakan	—	—	—	—	—	—	—
	Kyaukpadaung	88	1,002	1,332	1,272	2,111	100	6,528
Pegu.	Saundwey	87	—	141	784	415	13	1,440
	Rangoon Town	—	—	—	—	—	—	—
	Banthalawaddy	3,735	—	4,770	17,668	1,662	383	28,218
Prome.	Pegu	10,692	—	1,845	11,618	505	145	24,305
	Tharawaddy	2,222	—	485	17,965	43	2,104	22,829
	Prome	2,165	640	599	18,978	31	1,734	26,147
Innawaddy.	Bassein	3,601	—	2,137	14,096	3,596	1,387	24,827
	Myitthaingyi	4,684	—	1,146	10,339	4,173	—	20,342
	Maubun	3,146	—	100	7,911	904	5,393	17,554
Yamethazi.	Pyaw	7,992	—	20	9,568	4,105	825	22,510
	Hennada	806	—	131	15,340	2,118	906	19,301
	Yamethazi	5,040	—	230	3,852	8,833	1,636	19,631
Madr.	Salween	—	—	300	—	—	—	300
	Tharbo	387	—	2,180	12,264	1,489	2,360	15,692
	Anchut	—	—	2,066	3,536	8,542	640	14,804
Mergui.	Taroy	5	—	1,462	636	4,141	102	5,350
	Mergui	—	—	4,608	1,073	500	14,800	20,981
Madr.	Thayetyingyi	786	12,174	1,485	8,342	615	1,169	24,571
	Pakhikun	351	262,991	943	3,881	—	11	269,177
	Minbu	1,210	—	6,372	7,839	—	237	15,619
Madr.	Magwe	910	934,804	399	14,632	—	—	936,745
Madr.	Mandalay	10,710	—	2,645	2,742	1,014	8,042	21,153
	Bhamo	1,352	—	415	194	500	58	2,709
	Myitthaingyi	1,429	50,630	500	188	425	58	52,230
Madr.	Katha	962	—	225	1,324	65	—	2,776
	Ruby Mines	2,214	338,265	588	641	1,325	6	343,041
Sagay.	Shwelo	861	1,280	317	4,954	1,378	351	6,281
	Sagay	423	—	1,763	2,779	292	65	5,222
	Lower Chindwin	493	—	3,307	1,451	119	375	5,736
Sagay.	Upper Chindwin	584	—	1,235	1,585	38	74	3,536
Madr.	Kyaukse	2,349	—	2,000	3,368	96	178	8,031
	Meiktila	4,437	—	559	11,239	5	345	16,685
	Yamethazi	2,517	—	835	8,181	200	25	11,758
Madr.	Prison	—	—	—	—	—	—	—
	Myingyan	709	399,058	810	8,362	138	221	400,358
Total		77,420	2,002,521	47,583	235,156	46,804	44,463	2,433,949

LAND REVENUE

907

TABLE VIII.

REVENUE PROCEEDINGS AGAINST DEFAULTERS DURING THE YEAR END-
ING 30 JUNE, 1905.

Division and District.	Warrants of Arrest issued.	NUMBER OF PERSONS		SALES OF PROPERTY.		AMOUNT OF ARREARS (IN RUPEES)	
		Arrested.	Com- mitted to Jail.	Movable.	Immo- vable.	For which application was made.	Realised.
Arakan.							
Akyab	1,269	539	4	40	271	30,701	42,975
Northern Arakan	—	—	—	—	—	—	—
Kyaukpada	1,015	451	—	5	7	10,896	7,399
Sandoway	600	262	40	1	1	4,540	3,164
Pegu.							
Rangoon Town	24	1	—	—	8	7,523	7,421
Hathawaddy	1,126	172	—	12	76	128,593	145,377
Pegu	163	2	—	7	67	75,372	62,000
Tharawaddy	104	39	—	—	148	9,853	6,202
Prome	1,020	216	1	2	105	5,186	3,652
Iravaddy.							
Bassien	1,100	81	—	49	102	115,324	102,342
Myingnyia	936	259	—	2	86	38,739	28,232
Ma-ahen	665	413	—	26	93	248,468	237,912
Pyaw	442	139	—	13	16	116,738	93,061
Henada	99	22	—	4	90	30,910	28,730
Tanasserim.							
Toungoo	430	226	—	—	29	12,553	8,358
Salween	—	—	—	—	—	—	—
Thaile	179	127	—	10	32	15,653	10,126
Amherst	1,167	72	—	—	46	14,339	10,359
Tavoy	275	117	—	3	18	3,728	2,917
Mergui	110	10	—	—	14	3,874	2,249
Minab.							
Thayetmyo	211	116	7	2	16	3,636	3,202
Paklaka	44	34	1	1	2	6,694	5,529
Minbu	13	10	—	—	—	6,966	6,754
Magne	1	1	—	—	3	2,040	1,779
Mandalay.							
Mandalay	211	24	—	8	4	97,095	78,982
Bhamo	1	—	—	—	—	1,044	802
Myittha	7	2	—	—	—	1,421	1,287
Katha	18	—	—	2	1	20,325	17,249
Ruby Mines	32	12	9	—	1	5,554	5,030
Sagay.							
Shwebo	13	13	—	4	2	3,459	2,945
Sagay	34	7	—	—	—	17,194	17,194
Lower Chindwin	17	2	—	1	—	2,156	1,849
Upper Chindwin	—	—	—	—	—	1,132	841
Mektila.							
Kyaukse	14	2	—	2	2	8,707	8,417
Mektila	41	6	—	2	—	2,968	2,873
Yamethin	10	3	—	1	1	9,345	8,708
Pyinmana	—	—	—	—	—	—	—
Myingyan	2	2	—	1	—	1,871	1,643
Total	11,393	3,382	62	198	1,271	1,115,107	966,854

TABLE IX.
SALES, MORTGAGES, AND REDEMPTIONS OF LAND DURING THE YEAR
ENDING 30 JUNE, 1905.

District.	SALES.		MORTGAGES DURING THE YEAR.		Area redeemed during the Year.	UNPAID MORTGAGES AT THE END OF THE YEAR.	
	Area.	Value of Consideration.	Area.	Amount.		Area.	Amount.
Akyab	22,818	637,906	3,400	50,753	5,666	9,998	106,643
Kyaukpada	733	19,855	—	—	—	5,975	137,009
Sandoway	855	38,807	978	25,428	948	2,965	86,081
Hanthawaddy	67,666	4,014,863	86,962	2,619,493	68,596	197,331	8,193,846
Pegu	71,965	2,459,796	34,311	1,029,237	27,066	66,170	1,779,133
Tharra-waddy	49,577	2,037,334	23,941	733,044	14,133	41,788	1,358,744
Pyaw	13,977	561,852	6,919	237,642	6,327	32,676	1,254,985
Ma-abin	24,607	810,931	18,249	678,122	9,006	42,155	1,296,794
Pyawda	61,519	2,116,641	66,285	2,070,860	45,766	132,113	3,373,571
Bassia	38,204	820,528	34,080	634,057	17,667	52,705	1,029,868
Hamada	21,996	1,086,899	8,504	333,864	5,260	16,777	563,324
Myaungmya	38,120	987,154	43,054	912,523	32,988	71,412	1,582,798
Yongoo	20,733	639,437	16,945	292,333	5,243	21,857	517,831
Tha-ton	38,524	3,303,313	29,062	1,469,796	20,707	54,361	2,711,677
Amherst	13,191	475,623	6,991	194,269	3,810	16,382	498,686
Yavey	2,832	199,722	1,127	54,793	1,070	4,284	159,710
Mongai	1,260	62,130	730	26,310	717	2,533	62,539
Thuyetmya	724	37,412	—	—	616	10	1,000
Minbu	62	2,677	19	630	10	229	19,308
Magwe	334	5,329	9,845	211,093	1,784	220,373	4,346,050
Mawlaik	7,677	125,063	30	1,425	4	354	5,433
Katha	1,565	8,818	104	660	91	1,007	7,477
Sagaing	1,247	44,618	208	9,130	21	558	12,843
Lower Chindwin	181	7,740	242	7,116	22	1,241	30,271
Kyaukse	6,224	79,531	2,991	73,275	1,362	16,904	283,379
Meiktila	275	9,480	—	—	—	—	—
Yamethin	1,830	70,258	—	—	—	48	1,212
Myingyan	691	23,990	79	1,625	379	539	13,373
Total 1904-5	539,565	20,685,109	387,712	11,693,767	271,260	1,012,395	28,173,343
Total 1903-4	554,213	18,920,033	297,926	8,332,791	269,345	906,765	23,186,798

LAND HOLDINGS

909

TABLE X.

CLASSIFICATION OF OCCUPIERS OF LAND AND DETAILS OF TENANCIES
AT FULL RENTS DURING THE YEAR ENDING 30 JUNE, 1905.

District.	AREA OCCUPIED BY			TENANCIES.	
	Agriculturists.	Non-agriculturists.		Area let at full rates.	Amount for which rented.
		Resident.	Non-resident.		
	Acres.	Acres.	Acres.	Acres.	Rs.
Akyab	570,673	65,074	137,072	141,985	1,109,878
Kyauksepyu	98,595	5,897	4,982	8,796	38,370
Sundoway	46,311	3,383	2,421	8,090	55,790
Hanthawaddy	838,698	87,716	233,432	416,903	5,128,538
Pegu	654,067	34,732	151,804	278,730	2,637,846
Tharrawaddy	385,894	33,593	40,588	113,082	1,432,854
Prome	327,182	5,732	11,980	35,022	286,495
Ma-ubin	324,634	60,884	50,414	128,784	1,400,066
Pyawla	377,964	71,149	113,578	199,449	2,091,735
Bassein	122,606	21,684	27,494	171,784	785,632
Hemada	493,110	12,762	22,526	137,711	1,432,869
Mysungmya	518,829	29,502	40,484	183,115	1,715,901
Toungoo	273,505	15,147	36,610	88,799	751,043
Thatun	556,679	33,831	34,860	69,368	875,247
Amherst	351,114	23,914	27,317	35,032	432,578
Tarrey	86,642	3,012	17,978	31,674	319,192
Mergui	76,759	1,032	5,036	7,842	58,123
Thayetyingyi	90,983	2,622	4,518	10,543	107,596
Minbu	363,138	38,709	3,243	9,529	141,586
Magwe	882,053	8,745	12,643	31,196	185,302
Mandalay	200,839	7,603	26,102	13,750	115,088
Katha	157,469	286	1,436	2,632	12,129
Sagay	663,243	21,449	30,447	9,885	31,283
Lower Chindwin	553,374	83,827	31,011	293	758
Kyaukse	222,304	5,231	15,862	11,832	99,447
Meiktila	590,116	1,734	1,020	71	2,193
Yamethin	14,263	4,804	7,145	25,222	210,251
Myingyan	1,114,758	11,289	8,062	55,541	308,497
Total for 1904-05	10,975,695	695,394	1,300,065	2,226,630	21,773,622
Total for 1903-04	10,601,041	622,651	1,046,396	2,204,693	18,632,083

TABLE XL

AGRICULTURAL ADVANCES DURING THE YEAR ENDING 31 MARCH, 1905.

District.	Payments.					Receipts.	
	Opening balance outstanding.	Advanced during the year.	Recovered during the year.	Closing balance outstanding.	Balance overplus.	Received in the year.	Balance overplus.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Akyab	5,875	2,335	—	6,715	450	363	22
Northern Arakan	2,000	—	2,000	—	—	50	—
Kyaukpadaung	—	—	—	—	—	—	—
Sandoway	100	200	200	100	—	5	—
Paga	300	200	300	100	—	18	—
Tharrawaddy	6,500	39,325	30,580	15,045	250	1,824	50
Patheingyi	3,041	14,350	9,741	7,650	—	660	—
Ma-abin	2,584	—	1,484	1,100	—	179	—
Pysgou	200	7,000	4,200	3,000	—	312	—
Bassein	18,907	11,240	17,389	12,758	645	1,400	61
Myaungmya	694	15,000	4,830	10,764	335	587	46
Salween	50	—	50	—	—	9	—
Amherst	1,650	3,000	1,050	3,600	—	183	—
Tavoy	2,580	—	2,580	300	200	128	15
Thayemye	7,532	12,000	8,594	9,009	955	802	107
Pakhalai	15,955	22,300	20,253	18,002	575	1,478	42
Mienai	14,527	9,525	17,186	6,886	1,110	1,042	52
Magwe	555	3,400	885	3,050	—	49	—
Mandalay	3,341	5,300	2,555	6,086	786	110	25
Bhamo	5,807	7,810	5,773	7,842	1,902	586	111
Myittha	6,218	7,225	6,123	7,422	920	336	80
Katha	23,521	6,500	19,036	10,985	290	1,385	23
Ruby Mines	14,710	14,530	7,467	21,778	1,080	1,003	76
Shwebo	21,934	9,384	23,655	7,674	4,174	1,853	206
Sagging	950	5,000	200	6,700	3,300	13	184
Lower Chindwin	3,697	50,000	24,862	28,235	—	1,896	—
Upper Chindwin	27,449	21,200	18,913	29,727	181	1,995	15
Kyaukse	39,667	55,050	5,294	44,423	5,991	3,893	445
Meiktila	39,617	29,600	37,364	11,853	2,203	3,283	169
Yamethazi	62,179	69,910	20,071	112,018	59,867	4,276	2,857
Myingyan	23,430	33,000	39,897	16,533	49	2,462	2
Total 1904-05	354,642	454,285	413,677	395,200	84,710	31,790	4,308
Total 1903-04	339,692	361,056	345,069	355,069	98,092	27,993	4,389

AGRICULTURAL ADVANCES

911

TABLE XII.

FINANCIAL RESULTS OF AGRICULTURAL ADVANCES MADE AND RECOVERED DURING THE FIVE YEARS ENDING 31 MARCH, 1905.

Year.	PRINCIPAL.				
	Opening balance outstanding.	Advanced during the year.	Recovered during the year.	Closing balance outstanding.	Balance overdue.
	Rs.	Rs.	Rs.	Rs.	Rs.
1900-01 . . .	228,628	111,580	172,060	168,148	32,678
1901-02 . . .	168,148	218,245	165,725	220,668	29,745
1902-03 . . .	220,853	347,078	235,953	331,978	56,702
1903-04 . . .	339,682	361,656	345,669	355,669	98,662
1904-05 . . .	354,642	454,283	413,677	395,250	84,710
Total . . .	1,311,953	1,492,244	1,333,084	1,471,113	301,927

Year.	INTEREST.			AMOUNT RECOVERED AS UNRECOVERABLE.		FINANCIAL RESULTS.		
	Total recoverable in the Year.	Recovered in the year, including amounts paid before due date.	Balance overdue.	Principal.	Interest.	Interest paid to the Government of India.	Interest recovered from sub-scribers in Burma.	Profit or loss.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1900-01 . . .	17,473	13,179	4,308	1,875	—	12,231	11,304	-927
1901-02 . . .	16,074	13,960	2,114	—	—	11,252	13,960	+2,708
1902-03 . . .	22,929	19,577	3,352	300	10	16,050	19,367	+3,317
1903-04 . . .	32,417	27,981	4,599	—	—	22,692	27,981	+5,289
1904-05 . . .	35,566	31,780	4,506	—	—	24,896	31,780	+6,884
Total . . .	124,459	106,477	18,985	2,075	10	87,121	104,392	+17,271

APPENDIX Q.

FORESTRY STATISTICS

- Table I. General Financial Results of Forest Administration in the Province of Burma, 1895-1904.
- Table II. Out-turn of Timber and Fuel from the Forests of Burma, 1895-1904.
- Table III. Financial Results of Forest Administration in Lower Burma, 1895-1904.
- Table IV. Financial Results of Forest Administration in Upper Burma, 1895-1904.
- Table V. General Forestry Statistics of Burma, 1895-1904. Area of Reserved Forest. Area of Unclassed State Forest. Out-turn of Timber and Fuel. Gross Revenue. Gross Expenditure. Protection from Fire.
- Table VI. Details of Forest Revenue in Burma, 1895-1904.
- Table VII. Details of Forest Expenditure in Burma, 1895-1904.

APPENDIX Q.

FORESTRY STATISTICS

TABLE I.	Year.	Gross revenue.	Expenditure.	Surplus.	Proportion of surplus to gross revenue.	Year.
FINANCIAL RESULTS OF FOREST ADMINISTRATION IN THE PROVINCE OF BURMA.						
TEN-YEAR PERIOD, 1895-1904.						
(In Rupees.)						
	1895	5,295,896	1,864,501	3,731,395	69%	1895
	1896	5,380,378	1,913,138	3,477,239	65	1896
	1897	6,559,847	2,081,454	4,478,393	68	1897
	1898	7,309,903	2,178,878	5,031,025	69	1898
	1899	8,291,927	2,373,079	5,918,848	71	1899
	1900	7,861,598	2,687,016	5,290,288	68	1900
	1901	7,706,534	2,644,612	5,061,922	66	1901
	1902	5,861,334	2,839,311	3,122,023	53	1902
	1903	6,737,825	2,963,338	3,774,509	56	1903
	1904	8,519,404	3,506,311	5,013,093	59	1904

TABLE II.
OUT-TURN OF TIMBER AND FUEL FROM THE FORESTS OF BURMA.
TEN-YEAR PERIOD, 1895-1904.
(In cubic feet, solid.)

Year.	Timber.					Fuel.		Year.
		Removed by Government.	Removed by purchasers.	Removed by free grantees.	Removed by right holders.	Total timber.	Total fuel.	
1895	All woods Teak	2,346,483 2,354,377	17,822,189 9,649,563	317,538 294,633	79,250 46,357	20,565,758 22,334,939	11,152,043	1895
1896	All woods Teak	2,782,444 2,678,299	19,660,135 16,023,039	429,435 277,798	161,256 37,494	22,863,279 15,696,539	10,961,685	1896
1897	All woods Teak	3,332,251 2,799,614	26,014,943 26,422,549	548,653 187,347	276,545 34,793	34,192,392 25,642,760	11,886,796	1897
1898	All woods Teak	3,285,403 2,697,971	24,960,324 12,796,227	3,278,441 226,294	302,269 none	31,907,437 25,628,697	26,129,384	1898
1899	All woods Teak	3,899,103 3,827,493	24,861,555 11,964,135	3,249,547 169,291	469,284 4,972	32,351,699 15,665,973	18,319,126	1899
1900	All woods Teak	3,124,354 2,988,638	22,568,991 16,415,635	276,073 246,331	336,334 26,335	26,769,844 13,746,737	12,903,240	1900
1901	All woods Teak	2,723,080 2,597,961	22,276,993 9,477,865	348,340 296,382	536,633 none	26,915,046 12,273,968	17,123,432	1901
1902	All woods Teak	3,223,341 3,060,796	20,695,116 6,512,627	381,872 293,007	642,513 none	24,992,342 8,968,335	15,954,862	1902
1903	All woods Teak	3,267,929 3,079,548	18,199,658 6,777,539	283,297 163,968	934,431 none	22,597,265 8,458,146	18,668,269	1903
1904	All woods Teak	5,268,119 5,267,674	22,723,216 6,635,499	302,821 130,847	534,147 none	28,828,503* 11,696,176†	19,719,078	1904

* There is a discrepancy of 20,000 cubic feet between the total here given and that given on page 651. The figures are drawn from different tables, and I have been unable to trace the error.—A. I.

† There is a discrepancy of 25,280 cubic feet between the total here given and that given on page 651. The figures are drawn from different tables, and I have been unable to trace the error.—A. I.

TABLE III.

FINANCIAL RESULTS OF FOREST

TEN-YEAR PERIOD,

(1)

TANANARIV CIRCLE.				
Year.	Gross revenue.	Expenditure.	Surplus.	Proportion of surplus to gross revenue.
1895	1,544,080	287,790	846,290	55.2%
1896	1,720,513	753,328	1,218,185	70.2
1897	2,082,492	598,384	1,484,108	71.4
1898	1,878,727	899,376	1,287,457	70.1
1899	1,523,139	646,667	877,472	57.6
1900	1,792,234	748,776	1,043,458	58.2
1901	1,636,718	687,804	948,914	57.8
1902	1,472,713	601,228	811,484	55
1903	1,406,709	714,253	722,470	51
1904	1,908,005	826,104	1,148,771	58

TABLE IV.

FINANCIAL RESULTS OF FOREST

TEN-YEAR PERIOD,

(1)

NORRHEIM CIRCLE.				
Year.	Gross Revenue.	Expenditure.	Surplus.	Proportion of surplus to gross revenue.
1895	1,722,475	329,837	1,402,638	80%
1896	1,560,282	365,090	1,205,590	78
1897	2,079,404	399,538	1,819,876	88
1898	2,216,136	535,842	1,680,293	76
1899	2,542,567	699,542	2,483,225	90
1900	1,848,551	568,334	879,667	59
1901	1,425,073	522,356	902,717	64
1902	1,261,240	781,728	499,516	39
1903	2,036,079	734,032	1,304,039	64
1904	2,261,484	766,922	1,514,562	66

FORESTRY STATISTICS

917

ADMINISTRATION IN LOWER BURMA.

TABLE III.

1895-1904.

rupees.)

Pegu Circle.				
Gross revenue.	Expenditure.	Surplus.	Proportion of surplus to gross revenue.	Year.
1,833,819	719,045	1,114,774	60%	1895
1,590,475	636,837	953,638	60	1896
1,953,855	838,539	1,115,315	57	1897
2,133,265	778,068	1,355,196	64	1898
2,659,708	794,563	1,865,145	69	1899
2,641,687	875,371	1,766,316	66	1900
2,342,528	848,348	1,494,180	64	1901
2,258,090	815,324	1,442,766	64	1902
2,355,187	856,337	1,498,850	64	1903
3,598,789	1,557,599	2,041,190	58	1904

ADMINISTRATION IN UPPER BURMA.

TABLE IV.

1895-1904.

rupees.)

SOUTHERN Circle.				
Gross revenue.	Expenditure.	Surplus.	Proportion of surplus to gross revenue.	Year.
485,512	217,829	267,683	55%	1895
708,096	291,634	416,462	59	1896
654,979	258,563	396,416	60	1897
821,785	278,409	543,376	66	1898
855,513	271,918	583,595	68	1899
2,154,826	504,599	1,650,227	76	1900
2,077,404	540,604	1,536,800	74	1901
948,692	382,635	566,057	59	1902
997,963	538,674	459,289	46	1903
1,070,126	555,556	514,570	48	1904

TABLE V.

GENERAL FORESTRY
DURING THE TEN-YEAR

YEAR.	Area of planted forest, in acres.	Area of unplanted State forest, in acres.	TOTAL CUTS, IN CUBIC FEET.	
			Of timber, in cubic feet.	Of fuel, in cubic feet.
1903	7,346,873	—	20,565,756	12,132,041
1904	8,202,947	—	22,862,279	16,961,685
1905	8,997,430	—	28,197,862	13,484,790
1906	9,412,878	—	31,907,437	26,179,384
1907	10,027,500	44,003,207	32,351,060	18,579,126
1908	10,977,167	46,248,277	30,769,844	12,861,540
1909	11,416,032	52,189,608	28,955,046	17,131,822
1910	11,868,200	57,190,577	24,962,382	18,864,822
1911	12,413,380	56,308,817	22,987,865	18,668,700
1912	12,824,967	60,051,410	28,628,303	19,728,079

TABLE VI.

DETAILS OF FOREST
DURING THE TEN-
(In

	1905.	1906.	1907.	1908.	1909.
Timber and other products removed by Government Agency	2,127,217	2,005,787	2,628,829	2,638,940	2,907,200
Removed by private individuals and companies:					
Timber	2,405,214	2,556,023	2,543,120	3,602,129	4,080,700
Firewood and charcoal	82,942	80,612	88,377	102,378	112,146
Stamens and sap	133,035	138,920	113,015	152,233	191,190
Grass and fodder	922	900	1,162	1,384	2,080
Other minor products	233,614	247,718	232,607	138,552	241,302
Confiscated wood	207,876	224,863	248,357	216,360	260,251
Derived from foreign timber and other products	207,828	241,680	228,580	273,034	313,759
Miscellaneous	75,238	60,000	77,061	80,214	218,213
Total	5,365,586	5,586,378	6,659,847	7,209,800	8,261,827

FORESTRY STATISTICS

919

STATISTICS OF BURMA.

TABLE V.

PERIOD 1895-1904.

FINANCIAL RESULTS.		PROTECTION FROM FIRE.			YEAR.
Gross revenue, in rupees.	Expenditure, in rupees.	Area in which protection was attempted, in acres.	Area of failures, in acres.	Cost of protection, in rupees.	
5,385,880	1,864,501	655,065	54,557	37,570	1895
5,390,376	1,913,138	836,763	82,569	47,566	1896
6,659,847	2,091,454	1,387,294	352,175	63,778	1897
7,209,003	2,178,878	1,321,312	197,056	62,350	1898
8,261,927	2,378,079	2,020,474	424,462	85,713	1899
7,987,298	2,607,010	2,438,123	213,057	103,278	1900
7,706,324	2,644,612	3,303,074	386,172	153,723	1901
5,951,354	2,820,311	3,462,915	276,024	168,020	1902
6,777,825	2,963,336	4,744,652	1,101,940	215,144	1903
8,519,404	3,500,311	5,398,560	825,337	272,623	1904

REVENUE IN BURMA.

TABLE VI.

YEAR PERIOD 1895-1904.

(rupees.)

1900.	1901.	1902.	1903.	1904.	
3,129,532	3,181,000	2,644,861	3,333,004	4,329,281	Timber and other produce removed by Government Agency
3,672,787	3,531,071	2,414,755	2,353,495	2,985,216	Removed by purchasers and consigners:
112,031	121,131	127,774	156,539	165,465	Timber
135,449	175,897	187,034	179,225	191,048	Firewood and charcoal
1,696	2,316	1,585	2,148	2,523	Bamboo and cane
285,742	181,262	70,037	100,595	141,539	Grass and fodder
217,006	174,289	127,236	207,061	240,774	Other minor produce
302,863	307,143	287,619	303,776	363,277	Confessed wood
90,172	101,277	110,133	191,846	104,191	Duty on foreign timber and other produce
					Miscellaneous
7,987,298	7,706,324	5,951,334	6,737,825	8,519,404	Total

TABLE VII.

DETAILS OF FOREST EXPENDITURE IN BURMA.

DURING THE TEN-YEAR PERIOD 1895-1904.

(In rupees.)

Year.	CURRENT AND WORKS.				
	Cost of ex- tracting tim- ber and other produce by Government agency.	Organization, improvement, and extension of forests.	Construction of new and buildings.	Live stock, stores, tools, and other charges.	Total for current and works.
1895	614,197	182,752	28,922	321,186	1,207,058
1896	573,841	228,407	73,849	225,256	1,099,353
1897	608,507	265,872	85,814	196,118	1,217,421
1898	627,496	266,620	64,328	213,745	1,267,549
1899	829,465	266,354	49,774	355,924	1,401,419
1900	969,989	417,664	23,002	264,296	1,695,171
1901	735,197	665,616	31,382	305,471	1,637,623
1902	904,679	496,725	90,323	284,928	1,715,346
1903	842,958	567,413	62,634	273,632	1,719,606
1904	1,249,793	609,086	141,652	286,328	2,277,862

Year.	ESTABLISHMENTS.				Grand total for current and works, and establish- ments for the whole of Burma.
	Salaries.	Travelling allowances.	Contingen- cies.	Total for es- tablishments.	
1895	677,064	89,803	20,486	797,453	1,664,301
1896	685,059	97,249	21,442	812,743	1,819,124
1897	723,261	94,914	27,266	865,443	1,984,864
1898	754,277	116,156	36,808	911,239	2,178,626
1899	808,269	121,366	41,543	971,069	2,373,079
1900	824,325	122,499	45,803	1,001,259	2,684,081
1901	856,818	127,297	46,484	1,022,999	2,644,612
1902	886,476	139,505	49,487	1,065,468	2,699,311
1903	961,804	149,614	55,002	1,166,420	2,965,124
1904	1,008,059	154,390	57,449	1,219,898	3,185,211

APPENDIX R.

MEDICAL AND VITAL STATISTICS

- Table I. Number of Indoor and Outdoor Patients treated in the State-public, Local Fund, and Private-aided Hospitals and Dispensaries of Burma during the Year 1905, and the Number cured, relieved, discharged, and died.
- Table II. Number of Indoor and Outdoor Patients treated in the State-special, Railway, and Private-non-aided Hospitals and Dispensaries of Burma during 1905.
- Table III. Expenditure on Medical and Sanitary Administration in Burma during the Years 1901-05.
- Table IV. Diseases of Indoor and Outdoor Patients in the Hospitals and Dispensaries of Burma during the Year 1905.
- Table V. Statistics of Vaccination in Burma during the Official Years 1902-03 to 1905-06.
- Table VI. Statistics of Births and Deaths, 1894-1903.
- Table VII. Number of Deaths according to Age, 1894-1903.
- Table VIII. Ratio of Deaths in each Thousand of Population according to Age, 1894-1903.

APPENDIX R.

MEDICAL AND VITAL STATISTICS

TABLE I.

NUMBER OF INDOOR AND OUTDOOR PATIENTS TREATED IN THE STATE-PUBLIC, LOCAL FUND, AND PRIVATE-AIDED HOSPITALS AND DISPENSARIES OF BURMA DURING THE YEAR 1905, AND THE NUMBER CURED, RELIEVED, DISCHARGED, AND DIED.

	Class of Patient.	Indoor.	Outdoor.	Total.
Daily Average Number Treated.	Men	2,141	3,220	5,361
	Women	333	882	1,215
	Male children	35	604	639
	Female children . . .	30	469	499
	Total	2,539	5,175	7,714
Number Treated during Year.	Men	49,234	569,251	618,485
	Women	5,081	164,264	169,345
	Male children	769	134,151	134,920
	Female children . . .	526	99,579	100,105
	Total	55,610	967,245	1,022,855
Cures, Deaths, etc.	Number cured . . .	43,846	No figures are available in regard to Outdoor patients.	
	Number relieved . .	3,877		
	Discharged	2,339		
	Died	3,473		
	Ratio of deaths per cent. of total treated,	6		

TABLE II.

NUMBER OF INDOOR AND OUTDOOR PATIENTS TREATED IN THE STATE-SPECIAL, RAILWAY, AND PRIVATE-NON-AIDED HOSPITALS AND DISPENSARIES OF BURMA DURING 1905.

Class of Institution.	Indoor Patients.		Outdoor Patients.		Total Male and Female.
	Male.	Female.	Male.	Female.	
State-special:					
Police	15,081	45	81,599	5,270	101,995
Canals	7	—	893	143	1,043
Others	—	—	7,309	987	8,296
Total	15,088	45	89,801	6,400	111,334
Railways	161	11	47,885	8,543	74,600*
Private-non-aided,	119	13	1,497	964	2,593
Grand total .	15,368	69	139,183	15,907	188,527*

* These totals include 18,000 patients for whom details are not available.

TABLE III.

EXPENDITURE ON MEDICAL AND SANITARY ADMINISTRATION IN BURMA DURING THE YEARS 1901-05.

(In Rupees.)

Nature of Outlay.	1901.	1902.	1903.	1904.	1905.
Medical Establishment . . .	295,731	299,597	312,589	337,942	373,258
Hospitals and Dispensaries . .	145,323	161,966	372,656	419,756	438,596
Sanitation* and Vaccination .	65,252	66,183	78,302	95,161	103,366
Grants for Medical purposes †	127,141	108,882	114,733	126,054	136,843
Medical Schools and Colleges .	4,833	5,058	2,402	2,772	2,779
Lunatic Asylum	47,239	49,790	45,782	54,776	62,452
Chemical Examiner	3,717	6,733	6,857	7,583	8,450
Refunds	16	1,624	362	121	188
Total	688,752	699,853	933,083	1,035,165	1,139,887

* Cost of establishment only. The expenditure on works is given in the section of Chapter XVIII dealing with sanitary administration.

† This item is made up chiefly of charges in connection with bubonic plague.

TABLE IV.

DISEASES OF INDOOR AND OUTDOOR PATIENTS IN THE HOSPITALS AND DISPENSARIES OF BURMA DURING THE YEAR 1905.

Nature of Disease.	In State-pub- lic, Local Fund, and Private-aided Institutions.	In State- general Institutions.	In Railway Institutions.	In Private non-aided Institutions.	Total in All Classes of Institutions.
GENERAL DISEASES:					
Small-pox	1,032	8	13	—	1,053
Cholera	737	30	9	—	776
Dysentery	16,032	2,634	1,597	3	20,266
Malarial fevers	139,237	32,065	10,728	647	182,677
Tubercular diseases	943	57	30	5	1,035
Leprosy	1,536	45	11	—	1,592
Syphilis, primary and second- ary	13,232	412	561	20	14,225
Gonorrhea	10,862	397	795	38	12,092
Worms	116,379	3,400	2,807	14	122,600
Scurvy	199	111	14	—	324
Rheumatic ailments	32,345	3,438	2,332	39	38,174
Carcinoma	389	2	1	1	393
Sarcoma	57	7	3	—	67
Anemia and debility	12,668	1,756	999	19	15,442
Other general diseases	24,565	907	863	11	26,376
LOCAL DISEASES:					
Of the nervous system	14,065	2,100	1,091	31	17,227
Of the eye	82,184	3,188	2,032	120	87,524
Of the ear	17,703	882	832	6	19,423
Of the nose	944	108	51	—	1,103
Of the circulatory system	839	105	71	—	1,015
Of the respiratory system, other than tubercle of the lungs	70,323	13,797	4,237	29	88,386
Dyspepsia	53,513	8,692	2,809	37	65,051
Diarrhea	29,816	2,872	1,872	54	35,614
Of the liver	1,603	161	136	4	1,964
Other diseases of the digestive system	82,063	9,432	7,289	31	98,815
Of the spleen	1,800	248	346	—	2,394
Of the lymphatic system	3,608	188	126	9	3,931
Goitre	5,400	63	5	443	5,911
Of the urinary system	3,917	140	172	13	4,242
Soft chancre	5,234	115	285	—	5,634
Other diseases of the generative system	8,236	197	405	5	8,843
Of the organs of locomotion	1,923	213	73	2	2,211
Of the connective tissue	19,696	1,790	876	12	22,374
Ulcers	117,103	11,761	5,379	180	134,423
Other diseases of the skin	70,070	4,322	3,446	255	78,093
All other local diseases	3,003	567	608	15	4,193
GENERAL AND LOCAL:					
Injuries	67,651	4,996	3,487	61	76,195
Opium poisoning	36	59	—	—	95
Other poisoning	892	54	89	—	1,035
Total number of Indoor and Outdoor patients treated	1,022,835	111,334	74,000*	2,593†	1,211,382
Number of operations	24,536	973	1,153	—	26,662

* Includes 18,000 patients for whom details are not available.

† Includes 489 patients for whom statistics are not available.

TABLE VII.

NUMBER OF DEATHS ACCORDING TO AGE IN LOWER BURMA,
1894-1903.

(Figures for Upper Burma are not available.)

Year.	Under 1 Year.		1 Year and Under 2 Years.		2 Years and Under 10 Years.		10 Years and Under 15 Years.		15 Years and Under 20 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1894	13,497	8,883	8,280	7,135	4,124	3,513	2,394	1,865	2,538	2,387
1895	13,631	9,358	8,529	7,432	3,905	3,299	2,307	1,782	2,547	2,128
1896	14,300	10,325	8,598	7,461	4,005	3,554	2,403	1,851	2,587	2,285
1897	16,321	11,668	9,133	7,967	4,658	3,845	2,904	2,563	2,936	2,665
1898	17,400	13,653	9,193	7,877	4,514	3,867	2,635	2,133	2,963	2,540
1899	17,630	13,000	9,839	8,307	4,613	3,785	2,635	2,084	3,352	2,746
1900	18,977	13,854	9,552	7,647	4,588	3,584	2,886	2,272	3,387	2,819
1901	19,027	14,461	9,500	7,154	4,590	3,504	2,858	2,584	3,388	2,844
1902	19,683	14,657	8,365	7,287	4,588	3,364	3,713	2,384	3,157	2,534
1903	21,087	14,852	8,352	8,184	4,643	3,907	3,526	2,528	3,808	3,231
Year.	20 Years and Under 30 Years.		30 Years and Under 40 Years.		40 Years and Under 50 Years.		50 Years and Under 60 Years.		60 Years and Upwards.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1894	5,753	3,283	5,783	4,657	4,813	3,592	4,228	3,279	7,024	6,632
1895	5,594	4,610	5,256	4,324	4,480	3,204	4,056	3,186	5,901	6,403
1896	5,167	4,998	5,620	4,629	4,421	3,340	3,908	3,967	7,486	6,803
1897	6,492	5,677	6,768	4,956	5,219	3,529	4,378	3,380	7,492	6,613
1898	6,268	5,183	6,629	4,745	5,280	3,615	4,738	3,331	7,413	6,388
1899	6,528	5,352	6,815	4,852	5,333	3,637	4,960	3,224	7,625	6,678
1900	6,509	5,551	6,886	5,156	5,347	3,735	4,778	3,083	7,416	6,352
1901	6,686	5,265	6,973	4,784	5,286	3,569	4,959	3,981	7,298	6,179
1902	5,967	4,731	6,352	4,494	4,864	3,159	5,864	3,751	6,839	6,072
1903	7,365	5,736	7,837	5,443	5,641	3,858	4,518	3,392	7,351	6,954

TABLE VIII.

RATIO OF DEATHS IN EACH THOUSAND OF POPULATION IN LOWER BURMA ACCORDING TO AGE, 1894-1903.

(Figures for Upper Burma are not available.)

Year.	Under 1 Year.		1 Year and Under 5 Years.		5 Years and Under 10 Years.		10 Years and Under 15 Years.		15 Years and Under 20 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1894	222.57	159.19	32.73	27.54	13.72	11.94	8.05	7.42	11.45	10.09
1895	208.37	150.71	33.31	28.61	13.07	11.19	8.10	6.89	10.14	9.35
1896	233.90	169.44	33.60	28.57	12.33	12.09	8.44	7.68	10.55	9.95
1897	269.24	188.24	35.66	30.53	15.51	13.08	10.20	8.61	13.37	11.79
1898	287.35	193.96	35.97	30.43	15.04	12.48	9.26	8.49	13.85	11.18
1899	294.49	212.77	38.93	32.44	15.55	13.03	10.08	8.39	14.77	12.20
1900	316.99	227.82	35.74	29.86	14.05	11.34	10.26	9.15	15.48	12.53
1901	297.23	218.92	25.62	22.65	11.66	9.46	8.58	7.36	12.53	10.50
1902	307.47	221.89	26.13	22.48	11.49	9.63	8.14	7.66	11.45	10.16
1903	331.80	227.83	29.16	25.37	13.11	11.26	9.73	8.52	14.11	12.00

Year.	20 Years and Under 30 Years.		30 Years and Under 40 Years.		40 Years and Under 50 Years.		50 Years and Under 60 Years.		60 Years and Upwards.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1894	12.85	12.96	16.75	19.18	22.23	19.04	30.79	35.52	60.70	60.96
1895	11.38	12.16	15.23	17.81	20.36	18.53	29.48	34.96	59.69	59.16
1896	11.54	13.19	16.30	19.08	20.10	18.75	28.40	33.88	64.78	62.66
1897	14.48	14.45	18.62	20.43	23.73	20.48	31.81	26.32	64.83	60.67
1898	14.02	13.68	19.24	19.56	24.03	19.78	30.82	25.33	64.21	58.60
1899	14.77	14.18	20.00	20.06	23.63	20.24	31.35	25.39	66.77	60.06
1900	14.72	14.68	20.21	21.49	24.61	21.74	31.48	24.30	64.97	58.93
1901	11.95	10.89	14.88	14.35	19.73	17.26	25.44	20.61	51.01	47.11
1902	10.58	9.89	13.60	13.48	17.92	15.28	24.11	19.02	48.44	46.29
1903	12.84	12.09	15.99	16.50	21.25	18.67	28.29	23.69	56.10	53.99

APPENDIX S.

STATISTICS OF THE TRADE AND SHIPPING OF BURMA

MARITIME FOREIGN TRADE.

Table	I.	Total Value of the Imports and Exports of Burma in the Maritime Foreign Trade, exclusive of Government Transactions. 1886-1905.
Table	II.	Value of Free and of Dutiable Merchandise imported into and exported from Burma in the Maritime Foreign Trade, exclusive of Gov't Transactions. 1901-05.
Table	III.	Value of Merchandise imported into Burma in the Maritime Foreign Trade from the Principal and Other Foreign Countries, exclusive of Government Transactions. 1886-1905.
Table	IV.	Value of the Principal Articles of Merchandise imported into Burma in the Maritime Foreign Trade, exclusive of Government Transactions. 1886-1905.
Table	V.	Value of Merchandise exported from Burma in the Maritime Foreign Trade to the Principal and Other Foreign Countries, exclusive of Government Transactions. 1886-1905.
Table	VI.	Value of the Principal Articles of Merchandise exported from Burma in the Maritime Foreign Trade, exclusive of Government Transactions. 1886-1905.

MARITIME COASTING TRADE.

Table	VII.	Total Value of the Imports and Exports of Burma in the Maritime Coasting Trade, exclusive of Government Transactions. 1886-1905.
Table	VIII.	Value of Merchandise imported into Burma in the Maritime Coasting Trade from the various parts of India, exclusive of Government Transactions. 1886-1905.
Table	IX.	Value of the Principal Articles of Merchandise imported into Burma in the Maritime Coasting Trade, from Indian Ports outside the Province, exclusive of Government Transactions. 1901-05.
Table	X.	Value of Merchandise exported from Burma in the Maritime Coasting Trade to various parts of India, exclusive of Government Transactions. 1886-1905.
Table	XI.	Value of the Principal Articles of Merchandise exported from Burma in the Maritime Coasting Trade to Indian Ports outside the Province, exclusive of Government Transactions. 1901-05.

PRIVATE IMPORT AND EXPORT OF TREASURE.

- Table XII. Value of the Private Import of Treasure into Burma in the Foreign and Coasting Trade. 1896-1905.
- Table XIII. Value of the Private Export of Treasure from Burma in the Foreign and Coasting Maritime Trade. 1896-1905.

GOVERNMENT TRANSACTIONS.

- Table XIV. Value of the Imports and Exports of Government Stores into and from the Province of Burma in the Foreign and Coasting Maritime Trade, exclusive of Treasure. 1886-1905.

THE TRANS-FRONTIER TRADE.

- Table XV. Value of Imports in the Trans-frontier Trade of Burma, exclusive of Government Transactions. 1900-05.
- Table XVI. Value of the Principal Articles of Merchandise imported into Burma in the Trans-frontier Trade, exclusive of Government Transactions. 1905.
- Table XVII. Value of Exports in the Trans-frontier Trade of Burma, exclusive of Government Transactions. 1900-05.
- Table XVIII. Value of the Principal Articles of Merchandise exported from Burma in the Trans-frontier Trade, exclusive of Government Transactions. 1905.

RICE TRADE STATISTICS.

- Table XIX. Quantity and Value of Rice exported from Burma in the Foreign and Coasting Maritime Trade, exclusive of Government Transactions. 1886-1905.

TEAK TRADE STATISTICS.

- Table XX. Quantity and Value of Teak exported from Burma in the Foreign and Coasting Maritime Trade, exclusive of Government Transactions. 1886-1905.

SHIPPING IN THE FOREIGN TRADE.

- Table XXI. Number and Tonnage of Vessels engaged in the Foreign Trade of Burma, distinguishing Sailing and Steam Vessels. 1896-1905.
- Table XXII. Number, Tonnage, and Nationality of Vessels which entered the Ports of Burma in the Foreign Trade. 1896-1905.
- Table XXIII. Number and Tonnage of Vessels engaged in the Foreign Trade of Burma which entered and cleared with Cargo and in Ballast. 1896-1905.

SHIPPING IN THE COASTING TRADE.

Table XXIV. Number and Tonnage of Vessels engaged in the Coasting Trade of Burma, distinguishing Sailing and Steam Vessels. 1896-1905.

Table XXV. Number, Tonnage, and Nationality of Vessels which entered the Ports of Burma in the Coasting Trade WITH CARGOES. 1896-1905.

Table XXVI. Number and Tonnage of Vessels engaged in the Coasting Trade of Burma which entered and cleared with Cargo and in Ballast. 1896-1905.

Table XXVII. Number and Tonnage of Vessels entered WITH CARGOES in the Coasting Trade of Burma, distinguishing Vessels entered in the External Coasting Trade and Vessels entered in the Inter-portal Trade within the Province. 1896-1905.

APPENDIX S.

STATISTICS OF THE TRADE AND SHIPPING OF BURMA

TABLE I.

TOTAL VALUE OF THE IMPORTS AND EXPORTS OF BURMA IN THE FOREIGN TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.

(IN RUPEES.)

Year ending March 31.	IMPORTS.			EXPORTS.		
	Merchandise.	Treasure.	Total.	Merchandise.	Treasure.	Total.
1886 . .	34,198,154	166,854	34,365,008	67,803,600	4,500	67,808,100
1887 . .	37,100,538	528,605	37,629,143	65,866,750	450	65,867,200
1888 . .	56,893,422	304,603	57,198,025	66,317,470	18,000	66,335,470
1889 . .	50,053,781	65,110	50,118,891	61,088,221	—	61,088,221
1890 . .	54,543,948	133,575	54,677,523	77,813,576	1,845	77,815,421
1891 . .	54,897,390	105,841	55,003,231	96,028,610	94,600	96,123,210
1892 . .	55,038,022	170,696	55,208,718	100,825,259	68,000	100,893,259
1893 . .	54,449,904	205,714	54,655,618	92,007,827	350,000	92,357,827
1894 . .	51,865,888	932,202	52,798,090	72,484,828	706,000	73,190,828
1895 . .	34,603,513	538,269	35,231,782	98,175,837	26,500	98,202,337
1896 . .	47,145,063	1,179,647	48,324,710	105,681,306	1,000	105,682,306
1897 . .	44,264,830	1,252,061	45,516,891	93,772,274	314,063	94,086,337
1898 . .	55,737,001	1,392,394	57,129,395	89,417,052	652,748	90,069,800
1899 . .	55,442,979	779,516	56,222,495	117,226,124	26,550	117,252,674
1900 . .	48,697,999	495,965	49,193,964	101,874,995	4,295	101,879,290
1901 . .	68,687,833	1,227,234	69,915,067	100,362,647	454,500	100,817,147
1902 . .	62,136,778	1,038,959	63,175,737	105,469,386	7,500	105,476,886
1903 . .	59,554,645	3,008,657	62,563,302	155,021,909	189,772	155,211,681
1904 . .	82,625,707	2,093,264	84,718,971	158,688,707	616,089	159,304,796
1905 . .	89,093,715	2,301,903	91,395,618	162,828,909	52,300	162,881,209

TABLE II.

VALUE OF FREE AND OF DUTIABLE MERCHANDISE IMPORTED INTO
AND EXPORTED FROM BURMA IN THE FOREIGN TRADE, EX-
CLUSIVE OF GOVERNMENT TRANSACTIONS, 1901-05.

(IN RUPEES.)

	Free Imports.	Dutiable Imports.	Total Imports.	Duty Collected.
1901	8,040,327	60,647,516	68,687,833	4,623,243
1902	8,824,246	53,312,538	62,136,778	4,360,634
1903	8,223,265	51,331,380	59,554,645	4,835,005
1904	11,606,764	71,018,943	82,625,707	5,665,865
1905	11,346,451	77,747,264	89,093,715	6,200,286
	Free Exports.	Dutiable Exports.	Total Exports.	Duty Collected.
1901	21,119,809	79,242,788	100,362,647	5,585,533
1902	19,827,845	85,641,541	105,469,386	6,349,819
1903	22,385,736	132,636,173	155,021,909	9,624,731
1904	27,320,550	131,368,157	158,688,707	8,762,302
1905	26,888,939	135,039,970	161,928,909	9,844,358

TRADE AND SHIPPING OF BURMA 937

TABLE III.

VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE FOREIGN TRADE FROM THE PRINCIPAL AND OTHER FOREIGN COUNTRIES, EXCLUSIVE OF GOVT TRANSACTIONS, 1886-1905. (IN RUPEES.)

Year ending March 31.	1886.	1895.	1896.
United Kingdom	25,158,684	22,506,951	31,303,128
Austria-Hungary	—	215,910	440,310
Belgium	—	685,288	1,056,352
France	63,607	439,339	609,155
Germany	548,215	1,253,352	2,246,072
Holland	—	1,054,212	1,093,268
Italy	275,724	13,371	21,429
Malta	—	2,575	824
Spain	80	2,090	2,439
Egypt	—	1,196	2,778
Mauritius	13,219	27,693	27,333
Canada	—	—	—
South America	4,450	38,524	18,261
United States	—	572,611	606,032
Arabia	60,962	7,889	29,744
Ceylon	50,517	93,878	31,475
China	3,235	73,265	48,744
Japan	—	16,430	42,301
Siam	7,082	10,545	13,587
Straits Settlements	7,009,474	7,530,453	9,180,858
Australia	224,953	145,233	102,023
Other Countries	778,482	21,708	274,350
Total	34,198,154	34,693,513	47,145,063
Year ending March 31.	1897.	1898.	1899.
United Kingdom	28,520,313	38,114,353	33,740,482
Austria-Hungary	384,282	483,852	459,792
Belgium	782,499	1,367,978	1,399,738
France	787,967	1,051,992	1,258,416
Germany	1,946,393	3,643,269	3,607,080
Holland	1,129,290	1,247,724	1,138,818
Italy	14,553	12,159	5,946
Malta	2,053	820	716
Spain	1,715	3,880	2,550
Egypt	16,615	17,792	39,729
Mauritius	29,692	74,215	68,775
Canada	—	21	—
South America	—	—	2,895
United States	1,642,987	879,084	1,298,990
Arabia	36,770	4,460	8,549
Ceylon	21,611	311,645	201,557
China	392,199	757,458	928,656
Japan	308,446	807,148	1,569,693
Siam	17,626	27,084	20,321
Straits Settlements	7,947,337	8,724,173	9,163,905
Australia	265,305	178,897	186,287
Other Countries	18,237	34,997	344,114
Total	44,264,830	55,737,601	55,442,979

TABLE III. (Continued).

VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE FOREIGN
TRADE FROM THE PRINCIPAL AND OTHER FOREIGN COUNTRIES,
EXCLUSIVE OF GOV'T TRANSACTIONS, 1880-1905. (In Rupees.)

Year ending March 31.	1890.	1901.	1905.
United Kingdom	29,856,018	40,317,784	36,130,136
Austria-Hungary	399,735	741,177	653,411
Belgium	1,455,482	2,156,019	1,979,864
France	967,169	1,690,802	1,611,486
Germany	2,906,556	4,943,255	3,694,596
Holland	1,166,936	1,829,171	2,267,261
Italy	25,878	89,259	86,087
Malta	165	345	216
Spain	2,800	11,710	12,306
Egypt	20,778	32,569	40,627
Mauritius	79,528	7,714	17,702
Canada	—	2,120	1,650
South America	949	35	—
United States	1,518,073	1,284,502	2,287,774
Arabia	38,827	32,368	41,194
Ceylon	112,474	258,694	180,678
China	868,222	1,201,285	761,196
Japan	1,248,614	3,957,050	2,178,106
Siam	15,398	27,422	13,424
Straits Settlements	7,334,809	9,225,129	9,633,393
Australia	200,808	204,586	289,286
Other Countries	230,018	582,597	144,669
Total	48,697,999	68,687,833	62,136,728
Year ending March 31.	1903.	1904.	1905.
United Kingdom	35,368,803	48,474,242	51,842,822
Austria-Hungary	733,493	1,266,974	1,213,547
Belgium	2,167,216	3,093,887	3,149,922
France	1,211,885	1,849,405	1,929,658
Germany	3,215,233	4,825,802	5,082,291
Holland	1,946,133	2,695,254	3,194,849
Italy	54,499	179,196	218,419
Malta	—	—	317
Spain	3,553	1,420	710
Egypt	41,232	38,295	46,969
Mauritius	17,608	3,352	7,860
Canada	—	—	—
South America	150	—	—
United States	1,852,263	2,530,096	3,639,397
Arabia	17,279	4,523	11,861
Ceylon	87,315	61,696	49,694
China	1,015,628	1,651,215	2,412,256
Japan	2,745,549	4,975,480	2,430,667
Siam	12,555	16,565	12,627
Straits Settlements	8,809,344	9,686,380	11,643,419
Australia	75,085	157,581	199,324
Other Countries	182,242	994,236	1,770,608
Total	59,554,645	82,625,707	89,060,713

TRADE AND SHIPPING OF BURMA 939

TABLE IV.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED INTO BURMA IN THE FOREIGN TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.

(IN RUPEES.)

Year ending March 31.	1886.	1896.	1901.	1905.
Ale, Beer, Porter	495,204	1,085,241	1,244,696	1,392,934
Spirits	684,445	1,215,755	1,386,538	1,524,611
Wines	160,498	286,466	248,672	226,385
Provisions*	2,134,275	3,375,669	4,523,594	5,146,104
Salt	1,063,813	1,378,668	1,042,530	980,922
Spices	474,484	279,655	420,876	364,126
Sugar	432,331	868,398	3,200,342	2,848,910
Hardware and Cutlery	497,130	1,277,336	2,353,682	2,691,620
Metals†	1,212,767	2,854,573	5,709,950	5,874,654
Machinery‡	585,321	1,044,245	2,018,909	2,753,699
Railway Plant and Rolling Stock§	—	30,483	49,388	21,020
Chemicals	116,793	342,839	485,950	621,692
Drugs, Medicines, Narcotics	77,565	176,552	205,762	236,676
Tobacco|| . . . . .	—	245,401	370,670	354,415
Kerosene Oil	664,888	900,710	822,273	1,553,945
Coal, Coke, Patent Fuel	1,422,349	603,877	467,332	550,513
Raw Silk	1,113,832	2,165,394	1,501,920	1,497,657
Silk Piece-goods¶	4,248,243	4,762,481	5,523,886	2,749,902
Cotton Twist and Yarn	2,985,282	4,733,664	4,324,566	3,832,280
Cotton Piece-goods	7,827,184	10,421,954	18,095,066	13,430,639
Manufactures of Wool	1,659,571	1,110,946	3,296,892	1,796,659
Apparel	804,676	1,534,440	2,354,318	1,963,556
Boots and shoes	—	185,500	390,599	494,779
Candles	—	446,357	196,999	136,536
Cement	—	156,788	271,551	112,437
Carriages and Carts	—	31,701	192,622	212,446
Earthenware and Porcelain	471,074	583,365	426,914	579,207
Glass and Glassware	217,144	381,422	465,699	560,294
Leather (other than boots and shoes)**	135,689	63,364	66,484	79,517
Matches	312,421	546,381	770,842	871,131
Paints and Colours	139,264	231,532	346,373	386,637
Paper and Pasteboard	—	155,678	248,176	268,941
Soap	100,635	122,601	213,623	240,496
Umbrellas and Sunshades	296,147	607,367	977,393	737,691

* Principal items, Salt Fish (Rs. 2,299,996 in 1905), Condensed Milk (Rs. 719,313 in 1905), and Hides (Rs. 637,367 in 1905).

† Principal items, Galvanized Iron Sheets (Rs. 2,153,611 in 1905), Iron Pipes (Rs. 2,025,545 in 1905), and Tinned Iron Sheets (Rs. 1,423,914 in 1905).

‡ Principal items, Steam Engines other than locomotives (Rs. 2,388,697 in 1905).

§ The railways of Burma being under Government control, nearly the whole import of Railway Material and Rolling Stock appears under "Government Imports." See p. 822 of this volume.

|| Chief item, Cigarettes (Rs. 580,423 in 1905).

¶ Including goods made of silk mixed with other material.

** The figures for 1886 include boots and shoes.

TABLE IV. (Continued).

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED INTO BURMA IN THE FOREIGN TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1896-1903.

(In Rupees.)

Year ending March 31.	1903.	1904.	1905.
Alc. Beer, Porter	1,256,766	1,798,231	1,689,661
Spirits	1,303,201	1,675,314	1,721,196
Wines	256,351	268,185	233,295
Provisions*	5,182,252	5,562,112	5,967,006
Salt	919,967	808,730	1,000,499
Spices	368,437	388,900	365,494
Sugar	2,418,574	3,535,912	3,517,562
Hardware and Cutlery	2,374,281	3,239,576	3,320,776
Metals†	5,727,389	39,757,647	10,102,436
Machinery‡	2,564,404	3,581,528	3,826,666
Railway Plant and Rolling Stock§	81,574	136,538	220,479
Chemicals	524,708	808,391	728,480
Drugs, Medicines, Narcotics	258,913	293,791	283,592
Tobacco¶	427,039	712,525	840,758
Kerosene Oil	641,493	1,285,449	1,827,456
Coal, Coke, Patent Fuel	354,161	146,273	677,008
Raw Silk	941,126	929,522	1,388,375
Silk Piece-goods¶	3,605,291	5,381,442	4,287,810
Cotton Twist and Yarn	3,893,886	4,527,555	3,162,506
Cotton Piece-goods	13,566,107	13,863,246	21,293,083
Manufactures of Wool	1,456,634	3,214,448	4,781,709
Apparel	1,828,191	2,695,424	2,613,614
Boots and Shoes	395,825	762,980	774,661
Candles	164,739	261,557	184,243
Cement	185,793	249,459	390,719
Carriages and Carts	282,415	518,206	481,236
Earthenware and Porcelain	624,856	799,768	763,083
Glass and Glassware	524,334	729,287	678,555
Leather (other than boots and shoes)**	90,848	160,167	222,555
Matches	948,919	1,263,536	971,832
Paints and Colours	456,508	538,484	479,305
Paper and Pasteboard	214,699	383,909	278,006
Soap	262,302	412,919	418,979
Umbrellas and Sunshades	495,456	923,038	998,238

* Principal items, Salt Fish (Rs. 2,996,899 in 1905), Condensed Milk (Rs. 719,313 in 1905), and Beans (Rs. 537,167 in 1905).

† Principal items, Galvanized Iron Sheets (Rs. 2,352,611 in 1905), Iron Pipes (Rs. 2,025,545 in 1905), and Tinned Iron Sheets (Rs. 1,423,914 in 1905).

‡ Principal item, Steam Engines other than locomotives (Rs. 2,563,697 in 1905).

§ The railways of Burma being under Government control nearly the whole import of Railway Material and Rolling Stock appears under "Government Imports." See p. 822 of this volume.

¶ Chief item, Cigarettes (Rs. 385,435 in 1905).

** Including goods made of silk mixed with other material.

** The figures for 1905 include boots and shoes.

TRADE AND SHIPPING OF BURMA 941

TABLE V.

VALUE OF MERCHANDISE EXPORTED FROM BURMA TO THE PRINCIPAL AND OTHER FOREIGN COUNTRIES, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905. (In Rupees.)

Year ending March 31.	1886.	1895.	1905.
United Kingdom	28,630,204	21,183,688	25,667,467
Austria-Hungary	—	244,837	16,795
Belgium	—	15,291	23,891
France	—	274,958	517,261
Germany	125,700	860,939	1,531,153
Holland	—	391,297	82,440
Italy	—	280,426	159,965
Malta	—	1,892,577	—
Spain	51,487	383,651	89,678
Egypt	—	36,462,587	38,122,361
Mauritius	52,381	123,899	283,258
Canada	—	234,357	—
South America	1,408,599	11,465,723	7,192,825
United States	—	180,122	182,329
Arabia	—	—	—
Ceylon	1,446,088	2,016,599	1,917,160
China	436,450	22,287	35,580
Japan	—	973,032	398,202
Siam	303,760	133,158	51,681
Straits Settlements	14,754,040	20,418,654	27,628,489
Australia	77,045	9,504	16,469
Other Countries	20,497,936	608,281	1,774,312
Total	67,803,690	98,175,837	105,681,306
Year ending March 31.	1897.	1898.	1899.
United Kingdom	22,290,621	18,157,097	26,393,322
Austria-Hungary	12,084	405,693	56,106
Belgium	—	3,000	13,140
France	135,561	109,067	116,650
Germany	543,622	7,528	759,673
Holland	15,012	44,625	48,540
Italy	232,600	2,000	800
Malta	—	—	—
Spain	86,630	432,128	122,693
Egypt	38,882,901	31,892,799	42,865,543
Mauritius	121,767	182,487	131,589
Canada	—	—	1,550
South America	7,856,302	10,873,683	5,168,855
United States	196,655	72,659	167,209
Arabia	—	72,017	1,917,778
Ceylon	2,054,751	3,531,681	3,133,480
China	76,501	2,136	532,636
Japan	1,500	4,387,167	6,812,080
Siam	43,367	34,038	166,614
Straits Settlements	20,764,694	17,672,515	26,012,780
Australia	118,632	15,977	179,485
Other Countries	329,214	1,518,815	2,685,601
Total	93,772,274	89,417,052	117,226,124

TABLE V. (Continued).

VALUE OF MERCHANDISE EXPORTED, 1886-1905. (In Rupees.)

Year ending March 31.	1905.	1904.	1903.
United Kingdom	23,323,761	21,381,634	20,747,436
Austria-Hungary	392,449	674,717	1,130,773
Belgium	23,900	6,000	30
France	73,543	79,979	234,342
Germany	964,088	703,194	2,560,644
Holland	100,202	80,680	571,737
Italy	129,431	197,247	115,448
Malta	—	—	—
Spain	2,300	—	39,517
Egypt	40,286,995	36,912,064	34,516,909
Mauritius	118,373	677,074	406,302
Canada	—	—	—
South America	6,421,339	5,344,015	6,791,303
United States	77,376	97,795	102,021
Arabia	151,377	57,619	60,303
Ceylon	2,537,650	2,952,072	3,041,320
China	688,699	459,790	1,328,914
Japan	2,561,864	310,738	1,530,308
Siam	124,330	188,090	177,940
Straits Settlements	30,723,982	25,733,790	26,678,123
Australia	308,328	37,022	360,286
Other Countries	2,724,499	4,729,241	4,577,698
Total	101,874,905	100,302,647	103,469,286
Year ending March 31.	1905.	1904.	1903.
United Kingdom	18,876,812	25,405,447	24,190,017
Austria-Hungary	3,280,379	9,007,945	13,691,365
Belgium	12,374	1,724,673	2,941,228
France	345,460	1,020,664	2,338,843
Germany	916,929	17,482,810	19,367,874
Holland	98,800	8,497,000	11,253,441
Italy	564,064	911,321	1,375,199
Malta	—	—	—
Spain	—	68,436	65,467
Egypt	55,671,748	2,922,815	1,978,269
Mauritius	289,940	345,054	337,398
Canada	—	302,953	—
South America	4,344,129	3,465,538	5,044,051
United States	40,442	103,630	99,310
Arabia	20,087	—	—
Ceylon	2,694,447	2,843,121	2,639,464
China	3,180,610	3,348,553	3,789,719
Japan	17,977,174	30,681,665	36,747,694
Siam	135,244	1,22,143	132,157
Straits Settlements	39,020,930	34,965,963	24,957,478
Australia	367,545	971,361	545,087
Other Countries	7,169,535	* 15,102,881	11,698,422
Total	153,021,909	158,688,707	162,828,300

* Of this sum Rs. 4,000,000 represents an export of rice to the Philippines in consequence of the failure of the crop in the Islands.

TABLE VI.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE EXPORTED FROM BURMA IN THE FOREIGN TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.

Year ending March 31.	1886.	1896.	1901.	1905.
Rice	55,238,058	87,439,906	79,242,788	85,641,541
Rice Bran	804,693	2,089,257	3,516,402	3,803,609
Teak	5,186,845	6,468,232	8,307,412	6,835,491
Hides and Skins, Raw	1,526,524	1,706,322	1,552,650	1,383,233
Mineral Oils	—	756,829	934,203	959,383
Candles	—	—	5,500	48,078
Caoutchouc, Raw	35,052	722,480	905,276	269,939
Jadestone	500,050	546,150	663,050	435,510
Cutch	1,691,388	3,352,484	1,848,901	1,194,898
Other articles	2,821,080	2,599,576	3,386,275	4,867,704
Total	67,803,699	105,681,306	100,362,647	105,469,386

Year ending March 31.	1902.	1904.	1905.
Rice	132,636,173	131,368,157	135,939,970
Rice Bran	4,427,383	4,184,225	4,331,295
Teak	6,513,881	8,825,067	5,809,811
Hides and Skins, Raw	1,960,294	2,307,753	3,263,869
Mineral Oils	880,182	1,094,860	2,805,987
Candles	437,805	893,732	944,106
Caoutchouc, Raw	49,834	124,172	412,991
Jadestone	657,100	822,585	624,050
Cutch	1,318,921	1,911,943	951,596
Other articles	6,110,426	7,046,213	7,765,294
Total	155,021,909	158,688,707	162,828,909

TABLE VII.

TOTAL VALUE OF THE IMPORTS AND EXPORTS OF BURMA IN THE
COASTING TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS,
1886-1905.

(In Rupees.)

Year ending March 31.	Imports.			Exports.		
	Merchandise.	Tonnage.	Total.	Merchandise.	Tonnage.	Total.
1886	32,963,384	16,438,297	49,371,681	22,726,416	5,449,662	28,175,878
1887	39,962,213	13,822,394	53,784,607	21,049,629	4,247,656	25,297,285
1888	44,446,080	8,637,732	53,083,758	22,817,974	2,959,969	25,777,843
1889	43,236,511	6,806,383	50,022,895	21,369,452	5,278,213	26,677,629
1890	41,083,720	7,547,908	48,629,628	20,840,051	3,395,792	27,235,843
1891	46,113,339	11,371,181	57,484,520	27,638,108	2,392,836	29,840,944
1892	49,968,325	18,292,509	68,260,734	25,896,619	563,271	26,459,890
1893	55,285,545	7,673,092	62,958,637	33,739,243	2,534,812	36,274,055
1894	66,728,187	1,360,739	68,088,926	41,573,273	3,699,618	45,262,891
1895	48,575,365	12,853,747	61,429,110	38,531,868	1,447,956	39,979,824
1896	55,055,908	5,785,802	60,831,710	35,465,129	627,262	36,092,409
1897	53,636,042	10,689,653	64,325,695	51,350,635	1,668,801	53,019,436
1898	56,817,627	10,232,486	67,050,113	74,144,841	4,819,904	78,964,745
1899	61,365,625	7,263,253	68,628,878	47,441,318	1,223,948	48,665,166
1900	59,419,269	17,252,271	76,671,480	81,184,244	3,279,966	84,455,130
1901	66,783,217	7,631,252	74,414,469	110,658,686	2,568,841	113,227,527
1902	65,709,858	10,045,054	75,754,912	81,977,814	1,490,467	83,468,281
1903	72,573,390	13,002,108	85,575,498	67,122,374	3,293,231	70,415,605
1904	77,884,834	8,579,537	86,455,491	62,167,251	2,623,742	64,790,993
1905	81,527,081	7,208,719	88,735,800	76,640,265	2,547,498	78,787,633

TABLE VIII.
VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE FROM THE VARIOUS PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1900.
(In Rupees.)

Year ending March 31.	Character of Merchandise.	From Bengal.	From Bombay.	From Madras.	From Burma.	From Indian Ports not British.	Total Coasting Imports.
1886	Indian	13,206,520	770,270	5,645,203	2,708,826	516,446	22,856,400
	Foreign	4,639,504	1,073,820	207,831	4,081,920	3,873	10,006,981
	Total	17,846,020	1,853,105	5,853,144	6,790,746	520,319	32,863,384
1887	Indian	15,270,516	1,063,013	7,213,754	3,372,495	768,326	27,698,104
	Foreign	5,084,770	1,950,267	317,472	4,415,396	254	12,774,100
	Total	20,355,286	3,019,280	7,531,226	7,787,891	768,580	30,462,212
1888	Indian	16,283,041	1,413,811	7,622,158	4,411,252	632,480	30,365,033
	Foreign	6,504,834	2,393,617	292,481	4,087,226	127	14,080,347
	Total	22,787,875	4,007,428	7,914,639	9,098,478	632,607	44,446,080
1889	Indian	16,484,077	1,000,705	7,849,502	4,330,655	1,267,160	31,780,015
	Foreign	5,359,467	1,389,405	257,768	4,446,351	2,385	11,435,376
	Total	21,843,444	3,390,110	8,107,270	8,777,006	1,269,545	43,215,511
1890	Indian	16,232,200	1,061,770	6,403,770	4,477,142	1,201,898	30,814,646
	Foreign	4,510,057	1,103,153	239,565	4,403,829	2,270	10,267,074
	Total	20,742,247	3,084,923	6,643,335	8,880,971	1,204,168	41,081,720

TABLE VIII. (Continued).
 VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE FROM THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1862-1905.
 (IN RUPEES.)

Year ending March 31.	Character of Merchandise.	From Bengal.	From Bombay.	From Sind.	From Madras.	From Burma.	From Indian Ports not enumerated.	Total Coasting Imports.
1861.	Indian	19,206,132	2,695,034	22,064	6,555,909	4,287,307	1,401,779	24,205,325
	Foreign	6,350,200	1,261,864	4,420	258,185	6,962,518	1,767	11,530,014
	Total	25,556,332	3,956,898	26,484	7,114,094	9,230,025	1,403,546	46,115,359
1862.	Indian	22,380,205	2,449,669	32,679	7,289,685	4,497,474	1,476,715	38,546,648
	Foreign	4,489,576	1,096,188	—	210,857	5,221,278	3,378	11,621,977
	Total	26,869,781	3,545,857	32,679	7,500,542	9,719,052	1,480,093	49,968,225
1863.	Indian	22,652,732	2,443,853	62,714	9,235,888	6,303,127	1,528,319	42,316,674
	Foreign	5,542,447	1,726,719	5,690	224,658	5,455,855	6,662	12,074,971
	Total	28,195,179	4,170,572	68,404	9,460,546	11,759,002	1,534,981	54,391,645
1864.	Indian	18,442,273	3,258,030	51,302	6,961,334	4,949,159	1,300,483	33,175,463
	Foreign	4,745,508	1,277,863	5,885	278,664	4,984,185	17,529	11,252,734
	Total	23,187,781	4,535,893	57,187	7,239,998	9,933,344	1,318,012	44,428,197
1865.	Indian	19,653,490	3,732,263	19,314	8,355,962	4,709,687	416,780	36,307,812
	Foreign	5,035,448	1,560,096	—	265,812	5,414,272	1,520	12,307,851
	Total	24,688,938	5,292,359	19,314	8,621,774	10,383,959	418,302	48,615,663

TABLE VIII. (Continued).
 VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE FROM THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.
 (IN RUPEES.)

Year ending March 31.	Character of Merchandise.	From Bengal.	From Bombay.	From Sind.	From Madras.	From Burma.	From Indian Ports and British.	Total Coasting Trade.
1896	Indian	20,034,456	4,472,131	20,670	10,591,546	5,478,203	261,268	41,738,514
	Foreign	4,837,663	2,440,217	1,500	183,510	5,830,376	4,148	13,297,294
	Total	25,772,099	6,912,348	22,170	10,775,056	11,308,579	265,416	55,035,808
1897	Indian	21,584,886	4,171,611	40,730	10,324,150	5,562,185	192,802	41,896,054
	Foreign	4,064,068	1,607,367	1,500	152,090	5,655,622	1,734	11,483,911
	Total	25,648,954	5,778,978	42,230	10,476,240	11,217,807	194,536	53,379,965
1898	Indian	25,406,229	4,006,737	99,500	10,755,681	5,317,173	182,697	45,768,677
	Foreign	3,586,564	1,255,762	500	168,898	5,996,707	1,172	11,049,550
	Total	28,992,790	5,262,499	100,000	10,924,579	11,313,770	183,869	56,818,227
1899	Indian	33,909,734	5,687,242	209,603	12,668,367	5,324,601	227,723	59,427,260
	Foreign	3,253,051	997,948	—	120,983	6,584,943	240	10,938,065
	Total	37,162,785	6,685,190	209,603	12,789,350	11,909,544	227,963	61,365,325
1900	Indian	27,466,691	4,379,892	181,050	11,557,266	5,352,926	186,200	49,066,931
	Foreign	4,313,239	994,123	3,341	181,731	5,838,643	1,201	10,352,278
	Total	31,779,930	5,373,015	184,391	11,738,997	11,211,569	187,401	59,419,209

TABLE VIII. (Continued).
 VALUE OF MERCHANDISE IMPORTED INTO BURMA IN THE COASTING TRADE FROM THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.
 (In Rupees.)

Year ending March 31.	Character of Merchandise.	From Bengal.	From Bombay.	From Sind.	From Madras.	From Burma.	From Indian Possessions Elsewhere.	Total Coasting Trade.
1901	Indian	30,875,249	6,092,805	144,041	12,446,266	5,943,247	188,553	55,700,751
	Foreign	3,325,727	719,605	30	149,107	6,689,350	647	11,084,469
	Total	34,490,976	6,772,309	144,071	12,595,373	12,592,597	189,200	66,785,217
1902	Indian	31,474,258	6,160,923	177,326	11,372,968	5,793,396	228,780	55,210,300
	Foreign	3,143,143	663,673	—	155,943	6,324,100	12,997	10,499,558
	Total	34,617,401	6,824,597	177,326	11,528,911	12,317,496	241,777	65,709,858
1903	Indian	32,194,090	6,258,303	165,048	14,012,238	6,969,599	340,044	60,949,313
	Foreign	3,490,279	859,038	436	169,531	6,854,659	340,297	11,614,073
	Total	35,684,369	7,097,341	165,484	14,181,769	13,824,258	680,341	72,573,386
1904	Indian	34,648,011	7,311,296	258,574	14,935,790	7,443,178	320,327	65,341,302
	Foreign	3,699,232	1,085,578	—	230,481	7,710,196	7,852	12,743,532
	Total	38,347,243	8,396,874	258,574	15,266,271	15,153,374	328,179	77,884,834
1905	Indian	38,109,294	7,829,103	171,435	15,319,179	7,269,840	313,969	69,232,813
	Foreign	3,558,142	1,607,147	7,275	176,540	7,553,992	1,872	12,295,068
	Total	41,667,436	9,436,250	178,710	15,495,719	14,823,832	325,841	81,527,881

TABLE IX.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED INTO BURMA IN THE MARITIME COASTING TRADE FROM INDIAN PORTS OUTSIDE THE PROVINCE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS. 1901-05.

(In Rupees.)

Principal Articles.	Character of Merchandise.	1901.	1902.	1903.	1904.	1905.
GUNNY BAGS	Indian	7,085,311	6,979,512	7,247,623	6,449,083	8,884,987
	Foreign	—	—	—	—	—
	Total	7,085,311	6,979,512	7,247,623	6,449,083	8,884,987
TOBACCO	Indian	5,550,401	5,333,690	5,486,108	5,116,037	5,813,584
	Foreign	65,457	74,906	42,874	42,648	37,388
	Total	5,615,858	5,408,596	5,528,982	5,158,705	5,850,972
COTTON TWIST AND YARN	Indian	3,115,148	3,097,427	3,072,281	3,767,443	4,007,824
	Foreign	368,838	400,723	575,739	413,834	392,250
	Total	3,483,986	3,498,150	3,548,020	4,180,777	4,400,074
COTTON MANUFACTURES	Indian	2,888,477	2,680,542	3,384,316	4,136,878	4,006,963
	Foreign	1,425,806	1,414,557	1,772,846	2,030,413	2,006,186
	Total	4,314,283	4,095,099	5,157,162	6,167,291	6,073,169
VEGETABLE OILS	Indian	4,118,580	4,141,788	5,767,738	5,602,338	5,422,550
	Foreign	—	—	—	—	—
	Total	4,118,580	4,141,788	5,767,738	5,602,338	5,422,550
PROVISIONS	Indian	5,481,906	5,965,053	6,271,128	6,743,836	6,916,810
	Foreign	68,776	51,878	81,020	93,737	84,800
	Total	5,550,682	6,016,931	6,352,148	6,837,573	7,001,610
COAL, COKE, PATENT FUEL	Indian	2,409,955	3,277,609	3,365,160	3,791,673	3,914,504
	Foreign	101,358	—	—	—	—
	Total	2,511,313	3,277,609	3,365,160	3,791,673	3,914,504
SEEDS	Indian	1,525,006	1,447,595	1,956,979	2,497,013	2,554,970
	Foreign	—	—	—	—	—
	Total	1,525,006	1,447,595	1,956,979	2,497,013	2,554,970
SPICES	Indian	5,730,998	4,869,385	5,159,677	5,444,928	5,766,547
	Foreign	79,873	79,706	100,613	54,724	—
	Total	5,810,871	4,949,091	5,260,290	5,499,652	5,766,547
SILK MANUFACTURES	Indian	1,308,774	1,205,129	779,556	700,951	572,710
	Foreign	119,663	78,709	135,053	31,991	44,760
	Total	1,328,437	1,283,838	914,609	732,942	617,470

TABLE IX.—*Continued.*

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED INTO BURMA IN THE MARITIME COASTING TRADE FROM INDIAN PORTS OUTSIDE THE PROVINCE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1901-05.

(In Rupees.)

Principal Articles.	Character of Merchandise.	1901.	1902.	1903.	1904.	1905.
WHEAT FLOUR	Indian	1,678,763	1,722,616	1,906,173	2,461,304	2,623,665
	Foreign	—	—	—	—	—
	Total	1,678,763	1,722,616	1,906,173	2,461,304	2,623,665
FRESH VEGETABLES	Indian	1,058,914	1,399,275	1,338,033	1,183,480	1,279,124
	Foreign	—	—	—	—	—
	Total	1,058,914	1,399,275	1,338,033	1,183,480	1,279,124
CABBAGE, BROCCOLI, TURNIPS	Indian	840,536	811,035	1,032,194	1,236,338	1,142,960
	Foreign	7,211	—	—	9,801	2,322
	Total	847,747	811,035	1,032,194	1,246,139	1,145,282
PULSES	Indian	795,010	978,501	1,022,070	1,094,741	1,187,139
	Foreign	—	—	—	—	—
	Total	795,010	978,501	1,022,070	1,094,741	1,187,139
SUGAR	Indian	380,717	330,363	338,727	361,198	750,174
	Foreign	2,730	72	12,311	7,336	15,945
	Total	392,447	330,435	351,038	368,534	766,119
METALS	Indian	683,653	603,832	711,242	880,899	894,334
	Foreign	270,300	214,927	181,411	197,732	346,931
	Total	953,953	818,759	892,653	1,078,631	1,241,265
HARDWARE AND CUTLERY	Indian	126,391	137,767	140,382	220,081	366,588
	Foreign	260,925	190,712	237,829	298,872	308,311
	Total	387,316	328,479	378,211	518,953	674,899
APPAREL	Indian	274,305	261,916	301,464	327,129	297,213
	Foreign	229,182	215,777	230,415	284,999	380,361
	Total	503,487	477,693	531,879	612,128	677,574
BOOTS AND SHOES	Indian	290,679	230,655	280,431	224,904	247,496
	Foreign	40,867	31,669	30,639	28,492	17,181
	Total	331,546	262,324	311,070	253,396	264,677
UMBRELLAS AND SUNSHADES	Indian	98,789	96,233	179,254	263,873	248,111
	Foreign	46,892	61,849	72,030	98,314	86,778
	Total	145,681	158,082	251,284	362,187	334,889

TABLE X.
VALUE OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE TO THE VARIOUS
PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.
(IN RUPEES.)

Year ending March 31.	Character of Merchandise.	To Bengal.	To Bombay.	To Madras.	To Burma.	To Indian Ports and Harbours.	Total Coasting Exports.
1886	Indian	3,920,714	7,553,223	4,569,783	2,250,141	244,246	18,484,007
	Foreign	270,537	30,606	24,146	3,913,257	400	4,241,809
	Total	4,200,971	7,583,829	4,593,947	6,163,398	244,646	22,726,416
1887	Indian	4,852,201	6,431,160	2,462,625	2,656,359	113,666	16,558,891
	Foreign	397,607	34,057	1,780	3,835,541	894	4,390,738
	Total	5,250,008	6,465,217	2,623,394	6,491,900	114,560	21,049,629
1888	Indian	5,648,429	5,782,163	16,939	3,797,291	110,949	17,510,871
	Foreign	329,681	87,041	1,299	4,833,221	780	5,207,103
	Total	5,978,101	5,869,204	17,159	8,630,512	111,729	22,817,974
1889	Indian	5,729,570	4,293,077	1,854	3,651,493	218,211	16,074,481
	Foreign	535,400	44,024	257	4,070,736	801	5,534,771
	Total	6,264,973	4,337,101	2,111	8,322,229	219,012	21,399,452
1890	Indian	5,690,563	5,737,414	5,520	3,882,006	336,313	18,832,443
	Foreign	465,018	29,214	—	4,459,747	3,050	5,007,608
	Total	6,155,581	5,766,628	5,520	8,341,753	339,363	23,840,051

TABLE X. (Continued).
 VALUE OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE TO THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1896-1905.
 (In Rupees.)

Year ending March 31.	Character of Merchandise	To Bengali.	To Bombay.	To Sind.	To Madras.	To Burma.	To Indian Ports and Ships.	Total Coasting Exports.
1891	Indian	6,637,252	6,030,431	2,480	4,054,803	3,446,242	383,282	22,254,891
	Foreign	528,603	28,450	1,850	43,554	4,930,096	775	5,533,258
	Total	7,165,855	6,058,881	4,330	4,098,357	8,376,338	384,057	27,788,149
1892	Indian	5,304,390	4,657,203	114,610	5,796,056	4,058,975	172,661	19,641,401
	Foreign	853,668	31,986	170	71,477	5,293,710	319	6,255,251
	Total	6,158,058	4,689,189	114,780	5,867,533	9,352,685	172,980	25,896,652
1893	Indian	6,267,339	6,269,034	331,622	8,434,912	3,478,303	183,641	22,265,451
	Foreign	834,039	24,255	400	75,534	5,301,029	35	6,443,792
	Total	7,101,378	6,324,189	331,622	8,510,446	10,679,332	183,676	28,709,243
1894	Indian	10,548,413	8,554,104	406	11,785,072	4,273,517	613,195	35,881,009
	Foreign	612,796	44,773	2,310	93,839	4,966,484	60	5,692,264
	Total	11,161,209	8,598,878	2,716	11,878,911	9,280,001	613,255	41,573,273
1895	Indian	8,706,189	10,552,470	418,826	7,322,470	4,041,908	1,353,440	32,437,322
	Foreign	833,748	17,292	5,010	58,765	5,181,375	58	6,094,546
	Total	9,539,937	10,569,762	423,836	7,381,235	9,223,283	1,353,498	38,531,868

TABLE X. (Continued).
 VALUE OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE TO THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.
 (In Rupees.)

Year ending March 31.	Character of Merchandise.	To Bengal.	To Bombay.	To Sind.	To Madras.	To Burma.	To Indian Ports not British.	Total Coasting Exports.
1886	Indian	6,024,631	9,615,436	380,930	7,385,921	4,501,849	539,675	28,754,442
	Foreign	883,348	34,904	2,600	63,684	5,728,076	72	6,710,684
	Total	7,805,979	9,650,340	383,530	7,449,605	10,229,925	539,747	35,465,126
1887	Indian	19,291,219	15,396,525	217,640	5,027,657	4,652,304	217,873	45,703,218
	Foreign	711,712	83,024	5,550	76,163	5,370,748	200	6,247,397
	Total	20,002,931	15,479,549	223,190	5,003,820	10,023,052	218,073	51,950,615
1888	Indian	31,541,457	10,849,330	500	13,796,451	4,937,070	280,753	67,268,757
	Foreign	939,400	45,245	50	531,960	5,740,529	—	6,778,084
	Total	32,480,857	10,894,575	550	13,789,511	10,698,269	280,753	74,144,841
1889	Indian	10,500,826	13,060,785	278,855	11,284,370	4,916,200	495,558	40,536,604
	Foreign	912,200	21,110	343	61,111	5,909,860	—	6,904,714
	Total	11,413,126	13,081,895	279,198	11,345,481	10,826,060	495,558	47,441,318
1900	Indian	10,655,681	46,074,893	7,178	11,245,172	5,141,322	343,530	74,367,776
	Foreign	1,022,862	75,638	—	62,663	5,655,231	54	6,816,468
	Total	11,678,543	47,050,531	7,178	11,307,835	10,796,553	343,584	81,184,244

TABLE X. (Continued).
 VALUE OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE TO THE VARIOUS
 PARTS OF INDIA, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.
 (In Rupees.)

Year ending March 31.	Character of Merchandise.	To Bengal.	To Bombay.	To Madras.	To Borneo.	To Indian Ports and Islands.	Total Coasting Exports.
1901	Indian	14,824,810	87,297,272	147,234	24,200,948	5,511,879	102,658,269
	Foreign	1,144,178	39,658	50	80,185	6,798,326	7,972,117
	Total	15,968,988	87,436,990	147,434	24,281,133	12,310,205	110,630,686
1902	Indian	24,639,952	55,808,711	240,314	17,802,254	5,387,961	74,882,489
	Foreign	947,683	26,225	262	45,715	6,471,534	17,486,394
	Total	25,587,635	55,834,936	240,576	17,847,969	11,859,495	93,333,814
1903	Indian	21,865,717	30,096,660	372,413	9,268,288	6,245,891	68,570,354
	Foreign	1,290,692	72,255	1,200	100,254	6,987,295	8,452,000
	Total	23,156,409	30,168,915	373,613	9,468,542	13,233,186	67,222,374
1904	Indian	25,236,617	11,691,825	131,681	9,469,078	6,654,011	53,186,462
	Foreign	1,366,534	39,471	1,900	144,824	7,453,524	9,000,709
	Total	26,603,151	11,731,296	133,581	9,613,902	14,107,535	62,187,171
1905	Indian	31,208,026	16,633,787	178,097	11,780,911	6,450,369	67,288,190
	Foreign	2,477,628	27,611	7,330	222,682	7,466,369	9,203,015
	Total	33,685,654	16,661,408	185,427	12,003,593	13,916,738	76,491,205

TABLE XI.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE EXPORTED FROM BURMA IN THE COASTING TRADE TO INDIAN PORTS OUTSIDE THE PROVINCE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1901-05.

(In Rupees.)

The exports itemised in this table are all of local produce or manufacture. The export in the Coasting Trade of articles of foreign produce and manufacture is made up of a large number of articles none of which reaches a value of Rs. 500,000.

Principal Articles.	1901.	1902.	1903.	1904.	1905.
Rice	73,448,422	45,703,500	27,057,796	13,374,239	20,514,655
Teak	7,851,736	7,911,637	6,875,120	6,582,281	7,681,574
Timber other than teak	309,350	388,418	513,472	450,769	772,543
Kerosene Oil	4,668,291	7,652,780	8,584,949	17,402,221	23,425,567
Other Mineral Oils	869,709	1,096,627	2,615,627	2,292,219	2,406,772
Pulse	4,239,094	1,497,902	938,416	979,766	774,433
Stick Lac	179,940	440,348	768,959	1,511,647	1,214,662
Cutch	515,820	304,368	404,316	524,931	308,675
Black Tin	19,008	21,060	107,362	106,310	315,868
All other articles	6,937,211	5,101,699	6,023,261	4,434,933	5,968,688
Grand total	98,438,571	70,118,319	53,889,278	48,059,316	62,723,637

TABLE XII.

VALUE OF THE PRIVATE IMPORT OF TREASURE INTO BURMA IN
THE FOREIGN AND IN THE COASTING TRADE, 1896-1905.

(IN RUPEES.)

Origin of Imports.	1896.	1897.	1898.	1899.	1900.
From Foreign Countries .	1,179,647	1,252,061	1,392,394	779,554	495,965
From Indian Ports outside the Province	3,287,572	9,237,413	9,287,829	6,571,178	13,950,179
Total from outside the Province	6,447,219	10,509,474	10,680,223	7,350,692	15,956,133
Inter-portal imports within the Province	328,230	1,432,240	984,657	692,677	1,792,101
Grand Total Imports .	6,875,449	11,941,714	11,664,880	8,043,369	17,748,236
Origin of Imports.	1901.	1902.	1903.	1904.	1905.
From Foreign Countries .	1,227,234	1,038,959	3,008,657	2,093,284	2,361,963
From Indian Ports outside the Province	6,983,739	9,265,424	10,796,105	6,858,139	5,637,092
Total from outside the Province	8,210,973	10,304,383	13,804,762	8,951,423	7,738,995
Inter-portal imports within the Province	647,513	779,630	2,306,003	1,732,396	1,771,627
Grand Total Imports .	8,858,486	11,084,013	16,110,765	10,683,821	9,510,622

TABLE XIII.

VALUE OF THE PRIVATE EXPORT OF TREASURE FROM BURMA IN THE FOREIGN AND IN THE COASTING TRADE, 1896-1905.

(IN RUPEES.)

Destination of Export.	1896.	1897.	1898.	1899.	1900.
To Foreign Countries . . .	1,000	314,063	652,748	26,550	4,295
To Indian Ports outside the Province	152,090	301,200	3,278,780	565,300	1,427,400
Total to outside the Province	153,090	615,263	3,931,528	591,850	1,431,695
Inter-portal exports within the Province	475,303	1,367,691	1,141,124	668,548	1,943,506
Grand Total Exports	628,393	1,982,954	5,072,652	1,260,398	3,375,201
Destination of Export.	1901.	1902.	1903.	1904.	1905.
To Foreign Countries . . .	454,500	7,500	189,772	616,089	52,300
To Indian Ports outside the Province	1,970,600	698,949	1,324,750	436,005	67,534
Total to outside the Province	2,425,100	706,449	1,514,522	1,052,094	119,834
Inter-portal exports within Province	628,241	791,518	1,968,481	1,587,737	2,079,874
Grand Total Exports	3,053,341	1,497,967	3,483,003	2,639,831	2,199,708

TABLE XIV.

VALUE OF THE IMPORTS AND EXPORTS OF GOVERNMENT STORES
INTO AND FROM BURMA IN THE FOREIGN AND IN THE COAST-
ING TRADE, EXCLUSIVE OF TREASURE, 1886-1905.

(IN RUPEES.)

Year.	Imports.			Exports.		
	Foreign.	Coasting.	Total.	Foreign.	Coasting.	Total.
1886	402,776	1,138,583	1,541,359	14,800	405,240	420,040
1887	279,092	1,312,390	1,591,482	76	296,760	296,836
1888	4,831,948	1,341,969	6,173,917	296	178,964	179,260
1889	2,656,399	831,320	3,487,719	460	165,594	166,054
1890	962,552	1,636,640	2,599,192	679	215,612	216,291
1891	2,662,581	1,111,653	3,774,234	2,028	280,833	282,861
1892	774,588	1,381,237	2,155,825	325	372,967	373,292
1893	1,336,866	1,562,123	2,898,989	355	365,303	365,658
1894	654,802	1,658,090	2,312,892	6,130	611,677	617,807
1895	1,082,648	989,096	2,071,744	9,225	183,992	193,217
1896	285,273	1,369,687	1,654,960	22,896	333,005	355,901
1897	1,548,368	1,942,465	3,490,833	1,963	404,027	405,990
1898	1,417,842	1,863,396	3,281,238	7,400	680,493	687,893
1899	1,307,496	1,419,698	2,727,194	2,540	625,126	627,666
1900	3,632,112	1,730,394	5,362,506	5,305	417,590	422,895
1901	4,106,863	2,398,302	6,505,165	1,658	432,657	434,315
1902	3,165,968	2,193,693	5,359,661	23,940	537,809	561,749
1903	2,239,867	3,198,927	5,438,794	36,669	975,568	1,012,237
1904	1,252,311	*		15,973	*	
1905	3,358,833	*		3,632	*	

* The value of the imports and exports of Government stores in the coasting trade during the years 1904 and 1905 is not given in the Report on the Maritime Trade of Burma sent in the annual statement of the Revenue Trade and Navigation of Burma with Foreign Countries and Indian Ports for those years.

TRADE AND SHIPPING OF BURMA

959

TABLE XV.

VALUE OF IMPORTS IN THE TRANS-FRONTIER TRADE OF BURMA,
EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1900-1905.

(IN RUPEES.)

Country of Origin.	1900.			1901.		
	Merchan- dise.	Timber.	Treasure.	Merchan- dise.	Timber.	Treasure.
Western China . . .	1,132,836	—	821,854	1,577,642	—	1,293,368
Northern Shan States	3,529,768	74,820	1,134,208	3,313,973	413,800	1,676,767
Southern Shan States	2,268,208	615,933	1,402,518	2,466,826	395,104	1,554,257
Northern Siam . . .	404,426	1,266,663	852,834	322,514	1,344,434	905,791
Southern Siam . . .	303,315	—	219,998	342,770	—	224,335
Karenni	7,418	2,586,789	61,235	7,976	2,549,403	68,200
Total	7,645,971	4,544,305	4,492,747	8,631,701	4,702,752	5,122,878
Country of Origin.	1902.			1903.		
	Merchan- dise.	Timber.	Treasure.	Merchan- dise.	Timber.	Treasure.
Western China . . .	2,897,351	—	1,688,395	1,333,313	—	1,389,570
Northern Shan States	2,879,173	118,739	952,256	3,367,122	632,429	879,582
Southern Shan States	2,607,690	538,699	1,243,794	2,288,323	329,871	1,067,194
Northern Siam . . .	563,291	1,784,068	894,140	515,263	1,325,436	705,156
Southern Siam . . .	494,645	—	90,050	343,317	—	67,272
Karenni	24,970	1,990,978	91,847	29,742	2,400,348	71,986
Total	9,467,190	4,441,484	4,960,392	7,877,680	4,888,084	4,180,700
Country of Origin.	1904.			1905.		
	Merchan- dise.	Timber.	Treasure.	Merchan- dise.	Timber.	Treasure.
Western China . . .	1,186,780	—	1,513,164	1,313,717	—	1,317,199
Northern Shan States	4,124,752	777,355	830,688	4,569,366	831,811	994,892
Southern Shan States	2,788,695	1,011,318	958,846	3,358,465	934,122	1,486,194
Northern Siam . . .	1,281,211	1,171,241	844,271	1,613,030	1,279,560	969,439
Southern Siam . . .	1,683,982	—	53,594	726,164	—	52,782
Karenni	50,771	3,102,003	65,126	94,066	2,410,311	138,715
Total	11,016,491	6,061,917	4,265,689	11,674,798	5,475,804	4,969,221

TABLE XVI.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE IMPORTED
INTO BURMA IN THE TRANS-FRONTIER TRADE, EXCLUSIVE OF
GOVERNMENT TRANSACTIONS, 1905.

(In Rupees.)

Country of Origin.	Live Animals.	Tusk and other Timber.	Pickled Tea.	Other Kinds of Tea.	Loa.
Western China	229,507	—	40	5,723	100,305
Northern Shan States . .	69,222	851,811	2,479,886	1,062,018	156,619
Southern Shan States . .	1,118,628	934,122	7,900	4,145	647,523
Northern Siam	1,460,937	1,279,560	213	243	—
Southern Siam	292,965	—	—	—	—
Karenni	39,455	2,410,311	68	2,000	38,766
Total	3,465,744	5,475,904	2,488,197	1,074,143	946,253
Country of Origin.	Fruits and Vegetables.	Raw Silk.	Silk Manu- factures.	Other Articles.	Total Imports.
Western China	45,891	432,230	—	466,980	1,313,717
Northern Shan States . .	15,491	—	—	798,140	5,421,177
Southern Shan States . .	411,794	1,300	92,440	1,074,429	4,292,597
Northern Siam	—	350	199,705	4,590	2,892,590
Southern Siam	—	2,500	127,000	3,579	726,164
Karenni	30	—	—	53,717	2,504,367
Total	473,216	436,600	419,241	2,331,444	17,330,602

TABLE XVII.

VALUE OF EXPORTS IN THE TRANS-FRONTIER TRADE OF BURMA,
EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1900-1905.

(IN RUPEES.)

Country of Destination.	1900.		1901.	
	Merchandise.	Treasure.	Merchandise.	Treasure.
Western China	2,226,352	157,626	2,822,087	385,189
Northern Shan States . . .	3,735,942	706,981	4,516,809	646,581
Southern Shan States . . .	3,643,764	700,800	3,874,558	901,661
Northern Siam	900,994	832,699	1,135,696	898,503
Southern Siam	268,678	270,794	359,489	209,161
Karenni	81,886	440,313	150,790	593,255
Total	10,857,566	3,169,213	12,839,419	3,634,350
Country of Destination.	1902.		1903.	
	Merchandise.	Treasure.	Merchandise.	Treasure.
Western China	3,933,587	431,603	3,039,984	234,560
Northern Shan States . . .	4,066,744	1,038,406	3,800,802	649,070
Southern Shan States . . .	3,742,338	779,507	3,535,065	477,903
Northern Siam	1,080,014	812,692	752,716	721,420
Southern Siam	242,155	205,128	140,690	163,875
Karenni	133,411	380,237	135,191	357,841
Total	13,218,249	3,647,573	11,404,448	2,604,609
Country of Destination.	1904.		1905.	
	Merchandise.	Treasure.	Merchandise.	Treasure.
Western China	3,317,546	277,817	3,677,885	411,195
Northern Shan States . . .	3,618,255	284,177	4,449,200	260,696
Southern Shan States . . .	3,273,270	686,525	4,615,037	1,062,406
Northern Siam	885,556	1,301,505	1,071,729	1,504,065
Southern Siam	209,690	806,931	250,362	312,260
Karenni	133,684	793,513	236,826	390,532
Total	11,497,971	4,150,766	14,261,039	3,941,553

TABLE XVIII.

VALUE OF THE PRINCIPAL ARTICLES OF MERCHANDISE EXPORTED
FROM BURMA IN THE TRANS-FRONTIER TRADE, EXCLUSIVE OF
GOVERNMENT TRANSACTIONS, 1905.

(In Rupees.)

Country of Destination.	Cotton Twist and Yarn.	Cotton-Muslin Factories.	Raw Cotton.	Rice-Muslin Factories.	Sub.
Western China	2,374,070	221,633	560,063	4,475	113,737
Northern Shan States . .	598,334	1,252,567	90	81,651	288,937
Southern Shan States . .	223,796	1,765,507	—	458,274	160,429
Northern Siam	78,695	330,591	—	165,674	5,048
Southern Siam	5,070	14,426	—	43,084	866
Karenni	2,415	17,183	—	22,764	3,830
Total	3,282,378	3,621,909	560,173	775,922	565,877
Country of Destination.	Dry Fish.	Wet Salted Fish.	Spices.	Other Articles.	Total Exports.
Western China	34,869	56,479	4,234	306,301	3,677,885
Northern Shan States . .	369,403	234,376	112,562	1,216,060	4,449,300
Southern Shan States . .	202,634	72,029	217,558	1,414,810	4,615,037
Northern Siam	6,419	3,694	22,308	439,300	1,071,729
Southern Siam	405	878	287	145,346	210,362
Karenni	4,309	3,546	33,337	149,634	236,836
Total	618,639	373,302	492,288	3,971,251	14,263,699

TABLE XIX.

QUANTITY AND VALUE OF RICE EXPORTED FROM BURMA IN THE FOREIGN AND COASTING TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1886-1905.

In this table the value of exports in the Coasting Trade includes the inter-portal exports within the Province. The value of rice exports in the Coasting Trade to ports outside the Province only is given in Table XI. The value of the inter-portal export is insignificant.

Year ending March 31.	FOREIGN.		COASTING.		TOTAL.	
	Tons.	Value in Rupees.	Tons.	Value in Rupees.	Tons.	Value in Rupees.
1886 . .	961,766	55,238,658	96,540	4,891,858	1,058,306	60,129,916
1887 . .	917,379	55,587,590	53,232	3,010,619	969,611	58,598,209
1888 . .	890,909	54,493,177	27,640	1,555,665	926,549	56,048,842
1889 . .	712,574	46,917,330	38,425	2,219,309	750,999	49,136,630
1890 . .	915,792	62,055,794	68,298	3,500,113	984,190	65,555,907
1891 . .	1,232,254	84,303,011	95,781	5,166,018	1,328,035	89,469,029
1892 . .	1,140,782	87,194,503	56,010	3,617,500	1,196,792	90,812,003
1893 . .	927,842	76,784,582	141,217	8,046,674	1,069,059	84,831,256
1894 . .	790,561	58,895,729	354,935	18,365,714	1,145,496	77,261,443
1895 . .	1,144,992	83,083,890	274,181	14,682,242	1,419,173	97,766,132
1896 . .	1,231,749	87,439,956	137,559	8,588,036	1,369,308	96,027,992
1897 . .	968,929	74,682,693	338,996	27,456,616	1,308,925	102,139,309
1898 . .	908,525	69,508,614	614,273	48,705,677	1,522,798	118,214,291
1899 . .	1,298,444	95,830,378	297,872	19,583,817	1,596,316	115,404,195
1900 . .	1,084,115	77,334,186	682,349	50,388,942	1,766,464	127,723,128
1901 . .	1,071,345	79,242,788	1,682,464	73,640,728	2,753,809	152,883,546
1902 . .	1,213,099	85,641,541	735,489	46,014,184	1,948,588	131,655,725
1903 . .	1,841,664	132,636,173	441,496	27,714,156	2,283,160	160,350,329
1904 . .	1,667,998	131,368,157	202,517	13,953,868	1,870,515	145,322,025
1905 . .	1,882,635	135,939,970	305,129	20,788,318	2,187,764	156,728,288

TABLE XX.

QUANTITY AND VALUE OF TEAK EXPORTED FROM BURMA IN THE FOREIGN AND IN THE COASTING TRADE, EXCLUSIVE OF GOVERNMENT TRANSACTIONS, 1896-1905.

In this table the value of exports in the Coasting Trade includes the inter-portal exports within the Province. The value of Teak exports in the Coasting Trade to ports outside the Province only is given in Table XI. The value of the inter-portal export is insignificant.

Year ending March 31.	FOREIGN.		COASTING.		TOTAL.	
	Cubic Yards.	Value in Rupees.	Cubic Yards.	Value in Rupees.	Cubic Yards.	Value in Rupees.
1896	46,453	5,186,845	121,668	8,440,371	168,121	13,627,216
1897	72,227	2,062,873	121,030	7,603,576	193,257	9,666,449
1898	32,216	3,301,033	132,718	8,354,339	164,934	11,656,272
1899	49,730	5,529,674	196,563	7,076,326	246,293	12,606,000
1900	68,634	7,338,020	156,332	7,849,175	224,966	15,187,195
1901	37,461	3,730,224	137,339	8,826,496	174,800	12,556,720
1902	42,735	4,230,258	119,117	7,447,568	161,852	11,677,826
1903	54,720	3,371,303	121,768	7,646,023	176,488	11,017,326
1904	43,177	4,276,052	119,763	7,546,492	162,940	11,822,544
1905	53,771	5,436,227	129,265	8,028,076	183,036	13,464,303
1906	60,861	6,468,252	146,585	9,225,674	207,396	15,693,926
1907	61,479	6,602,111	131,277	8,635,943	192,756	15,238,054
1908	79,451	9,271,553	121,135	8,448,435	200,586	17,719,988
1909	73,706	9,096,191	133,072	9,309,898	206,778	18,406,079
1900	75,437	8,880,000	128,053	7,915,114	203,490	16,795,114
1901	71,192	8,307,412	121,418	8,117,492	192,610	16,424,904
1902	28,012	6,835,491	117,702	8,133,128	145,714	14,968,619
1903	54,368	6,513,881	103,464	7,165,773	157,832	13,679,654
1904	71,633	8,825,067	99,474	7,240,896	171,107	16,065,963
1905	44,933	5,809,811	91,264	7,293,590	136,197	13,103,401

TABLE XXL

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE FOREIGN
TRADE OF BURMA, DISTINGUISHING SAILING AND STEAM VESSELS
1896-1905.

Year ending 31 March.	ENTERED THE PORTS OF BURMA.					
	Sailing.		Steam.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896	180	135,041	311	508,375	491	643,416
1897	153	103,688	265	438,031	418	541,719
1898	179	107,970	301	491,492	480	599,462
1899	130	98,918	376	625,030	506	723,948
1900	128	72,753	379	638,285	507	711,038
1901	113	28,565	367	651,334	480	679,899
1902	107	25,846	386	731,963	493	757,809
1903	89	20,753	453	946,868	542	973,621
1904	94	43,945	459	951,204	553	995,209
1905	102	27,850	521	1,136,653	623	1,164,603

Year ending 31 March.	CLEARED FROM THE PORTS OF BURMA.					
	Sailing.		Steam.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896	174	141,626	377	652,342	551	793,968
1897	142	112,201	321	538,439	463	670,640
1898	136	115,528	329	545,198	465	660,726
1899	139	110,702	428	739,246	567	849,948
1900	101	71,985	387	666,539	488	738,524
1901	75	25,310	389	709,704	464	735,014
1902	65	18,677	400	782,169	465	800,846
1903	72	25,346	506	1,086,909	578	1,112,315
1904	81	44,558	504	1,090,063	585	1,134,621
1905	72	16,783	533	1,173,970	605	1,190,753

TABLE XXII.
NUMBER, TONNAGE, AND NATIONALITY OF VESSELS WHICH ENTERED THE PORTS OF BURMA IN THE
FOREIGN TRADE, 1896-1905.

Nationality of Vessels.	1896.		1897.		1898.		1899.		1900.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
British	345	842,745	284	682,388	302	697,214	307	614,388	349	596,613
British Indian	9	1,859	6	1,265	24	4,247	4	1,022	15	2,746
Foreign Indian	82	96,651	68	74,785	93	95,076	90	105,245	84	106,187
Foreign Chinese	1	130	3	904	—	—	—	649	4	327
Native Own	26	2,631	27	2,577	60	2,725	44	2,358	47	3,439
Total	481	943,416	418	841,719	480	899,482	506	723,948	507	711,038
<i>Details of Foreign Vessels.</i>										
American	—	—	—	1,874	—	7,492	1	1,220	—	—
Austrian	—	—	1	40	—	—	—	1,696	—	—
Chinese	—	—	2	2,965	—	—	—	—	—	—
Dutch	2	1,563	—	—	8	1,823	8	1,428	5	9,523
French	—	—	—	—	8	3,147	4	1,166	13	3,961
German	44	553	24	1,702	25	1,909	2	1,639	2	1,795
Japanese	—	—	—	84,919	—	32,002	30	49,725	25	41,558
Italian	—	—	1	1,616	—	2,245	2	4,131	—	—
Norwegian	—	—	—	666	—	41,228	—	1,398	—	—
Russian	24	24,059	25	23,136	42	41,228	42	38,624	30	32,090
Swedish	1	180	2	2,182	1	928	2	1,522	—	—
Swiss	—	—	—	—	—	—	—	—	—	—
British	2	—	—	30	—	—	—	—	—	—
Swedish	—	2,561	1	6,241	5	3,673	3	2,323	3	2,709
Total	82	96,651	68	74,785	93	95,076	90	105,245	84	106,186

TABLE XXII. (Continued).
NUMBER, TONNAGE, AND NATIONALITY OF VESSELS WHICH ENTERED THE PORTS OF BURMA IN THE
FOREIGN TRADE, 1899-1903.

Nationality of Vessels.	1901.		1902.		1903.		1904.		1905.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
British	329	568,820	328	622,606	302	777,911	373	789,704	454	978,892
British Indian	34	5,734	29	5,244	12	2,501	13	2,838	26	4,982
Foreign	57	100,510	75	124,961	110	188,689	121	189,511	81	175,197
Foreign Indian	2	261	4	438	—	—	—	—	—	—
Native Craft	58	4,374	57	4,470	58	4,400	46	4,156	62	5,544
Total	480	679,899	493	751,900	542	973,621	553	995,250	623	1,164,603
<i>Details of Foreign Vessels:</i>										
American	—	27,793	15	37,276	13	35,128	9	22,002	10	29,719
Austrian	13	—	1	60	2	110	9	273	1	37
Chinese	—	—	2	2,332	1	1,991	—	—	—	2,480
Danish	3	6,162	3	6,116	1	1,958	1	1,200	2	5,788
Dutch	2	1,454	3	—	1	12,839	6	11,082	1	2,291
French	2	2,385	—	—	6	72,474	44	97,226	33	99,609
German	20	37,253	22	41,820	37	2,302	—	—	—	—
Japanese	—	—	—	—	1	—	—	—	—	—
Italian	—	823	—	—	—	—	—	—	—	—
Norwegian	1	9,365	—	—	—	—	—	—	—	—
Russian	6	11,024	23	24,411	38	38,125	48	53,100	20	35,125
Maldiv	6	—	5	9,233	8	22,272	2	2,220	—	—
Greek.	—	—	—	—	—	—	—	—	—	—
Siamese	1	1,796	—	—	—	—	—	—	—	—
Swedish	—	2,522	4	3,713	1	6	—	—	1	16
Total	57	100,510	75	124,961	110	188,689	121	189,511	81	175,197

TABLE XXIII.

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE FOREIGN TRADE OF BURMA WHICH ENTERED AND CLEARED WITH CARGO AND IN BALLAST, 1896-1905.

Year ending 31 March.	ENTERED THE PORTS OF BURMA.							
	Sailing Vessels.				Steam Vessels.			
	With Cargo.		In Ballast.		With Cargo.		In Ballast.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896 .	74	29,879	106	95,162	204	206,424	119	201,955
1897 .	72	23,187	85	80,301	174	202,776	90	175,255
1898 .	72	31,785	107	78,185	184	273,776	117	217,735
1899 .	61	29,828	69	69,090	218	325,060	158	299,940
1900 .	47	16,231	81	56,522	230	247,996	149	290,289
1901 .	36	7,834	77	30,731	219	246,624	148	304,739
1902 .	47	9,969	60	15,986	239	447,644	127	284,529
1903 .	45	9,847	44	16,906	290	512,264	183	454,604
1904 .	56	5,961	58	37,384	345	605,971	154	348,290
1905 .	42	7,012	60	20,938	311	629,150	209	516,935

Year ending 31 March.	CLEARED FROM THE PORTS OF BURMA.							
	Sailing Vessels.				Steam Vessels.			
	With Cargo.		In Ballast.		With Cargo.		In Ballast.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896 .	173	137,779	3	3,847	376	650,301	1	2,043
1897 .	136	135,474	6	1,727	319	554,591	2	3,848
1898 .	123	115,623	3	165	329	545,198	—	—
1899 .	136	139,645	3	57	428	739,246	—	—
1900 .	97	71,505	4	50	385	602,915	2	3,624
1901 .	73	25,265	2	105	288	709,660	1	44
1902 .	62	14,862	2	3,815	400	782,169	—	—
1903 .	72	25,346	—	—	506	1,086,969	—	—
1904 .	81	44,558	—	—	395	1,089,893	1	170
1905 .	72	16,783	—	—	332	1,172,135	1	1,865

TRADE AND SHIPPING OF BURMA

969

TABLE XXIV.

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE COASTING TRADE OF BURMA, DISTINGUISHING SAILING AND STEAM VESSELS, 1896-1905.

Year ending 31 March.	ENTERED THE PORTS OF BURMA.					
	Sailing.		Steam.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896*	—	—	—	—	2,670	1,327,975
1897	1,043	54,149	1,636	1,328,141	2,679	1,382,290
1898	1,042	62,208	1,794	1,415,051	2,833	1,477,259
1899	1,119	45,931	1,772	1,390,084	2,891	1,406,015
1900	1,083	52,610	1,731	1,399,342	2,814	1,451,952
1901	1,176	60,442	1,788	1,580,465	2,964	1,640,907
1902	1,129	56,158	1,807	1,623,067	2,936	1,679,225
1903	1,351	56,207	1,843	1,706,982	3,194	1,763,189
1904	2,418	79,685	1,862	1,826,458	4,280	1,906,143
1905	1,530	70,340	1,929	2,034,572	3,459	2,104,912

Year ending 31 March.	CLEARED FROM THE PORTS OF BURMA.					
	Sailing.		Steam.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896*	—	—	—	—	2,643	1,179,433
1897	1,112	48,921	1,578	1,207,103	2,690	1,256,024
1898	1,105	57,296	1,767	1,359,140	2,872	1,416,436
1899	1,139	44,736	1,721	1,257,735	2,860	1,302,471
1900	1,149	60,406	1,708	1,339,726	2,857	1,400,132
1901	1,247	67,661	1,767	1,533,966	3,014	1,601,627
1902	1,182	59,745	1,772	1,540,766	2,954	1,600,511
1903	1,407	58,916	1,797	1,561,538	3,204	1,620,454
1904	2,141	81,547	1,833	1,726,772	3,974	1,808,319
1905	1,448	76,153	1,897	1,957,937	3,345	2,034,090

* The number and tonnage of sailing and steam vessels is not distinguished in the Report on the Trade and Navigation of Burma for the Year 1896-96.

TABLE XXV.
NUMBER, TONNAGE, AND NATIONALITY OF VESSELS WHICH ENTERED THE PORTS OF BURMA IN
THE COASTING TRADE WITH CARGOES, 1890-1905.

Nationality.	1896.		1897.		1898.		1899.		1900.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
British	1,483	1,658,783	1,515	1,120,375	1,633	1,185,192	1,632	1,187,005	1,518	1,154,471
British Indian	21	3,098	28	1,056	32	7,314	17	4,283	28	6,413
Foreign	1	1,892	2	3,669	24	14,553	6	3,062	43	25,879
Foreign Indian	—	—	9	657	5	1,084	2	333	6	730
Native Craft	919	28,009	851	26,777	886	29,807	1,011	29,671	911	26,472
Total	2,424	1,114,993	2,405	1,177,634	2,580	1,237,650	2,668	1,226,354	2,503	1,214,095

Nationality.	1901.		1902.		1903.		1904.		1905.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
British	1,512	1,173,176	1,604	1,247,992	1,611	1,610,012	1,642	1,533,232	1,720	1,272,618
British Indian	26	4,529	28	1,571	11	5,200	38	7,434	39	8,090
Foreign	16	33,054	18	42,474	23	52,384	24	48,869	21	63,093
Foreign Indian	2	323	3	368	—	—	2,341	54,923	1,272	40,396
Native Craft	1,090	34,957	977	32,182	1,145	40,492	2,341	54,923	1,272	40,396
Total	2,539	1,248,107	2,582	1,429,588	2,802	1,806,246	3,845	1,653,604	3,602	1,844,697

TABLE XXVI.

NUMBER AND TONNAGE OF VESSELS ENGAGED IN THE COASTING TRADE OF BURMA WHICH ENTERED AND CLEARED WITH CARGO AND IN BALLAST, 1896-1905.

	ENTERED THE PORTS OF BURMA.							
	Sailing Vessels.				Steamers.			
	With Cargo.		In Ballast.		With Cargo.		In Ballast.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896 *	—	—	—	—	2,424	1,114,993	246	212,982
1897	889	36,374	154	17,775	1,516	1,141,000	120	187,081
1898	927	43,687	115	18,521	1,653	1,194,161	141	220,888
1899	1,031	34,305	88	11,626	1,637	1,192,049	135	168,035
1900	944	35,672	139	16,938	1,559	1,178,423	172	239,919
1901	1,034	42,199	142	18,243	1,525	1,205,908	263	374,557
1902	962	41,566	167	14,562	1,620	1,388,022	187	235,945
1903	1,166	45,852	185	10,355	1,636	1,462,396	207	244,586
1904	2,180	62,363	238	17,322	1,665	1,591,531	197	234,927
1905	1,311	54,196	219	16,144	1,741	1,790,501	188	244,671

	CLEARED FROM THE PORTS OF BURMA.							
	Sailing Vessels.				Steamers.			
	With Cargo.		In Ballast.		With Cargo.		In Ballast.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896 *	—	—	—	—	2,206	1,145,942	437	33,491
1897	791	34,072	411	14,849	1,546	1,191,172	32	15,931
1898	825	46,929	280	10,367	1,728	1,336,576	39	22,564
1899	766	35,270	373	9,466	1,677	1,230,197	44	37,538
1900	769	43,595	380	16,811	1,675	1,314,236	33	25,490
1901	855	53,307	392	14,154	1,713	1,475,125	54	58,841
1902	769	46,635	413	13,110	1,728	1,497,478	44	43,288
1903	764	38,840	643	20,070	1,746	1,509,906	51	51,632
1904	1,056	55,338	1,085	26,209	1,730	1,611,453	103	115,319
1905	842	55,563	606	20,590	1,808	1,853,201	89	104,736

* The number and tonnage of sailing and steam vessels is not distinguished in the Report on the Trade and Navigation of Burma for the Year 1895-96.

TABLE XXVII.

NUMBER AND TONNAGE OF VESSELS ENTERED WITH CARGOES IN THE COASTING TRADE, DISTINGUISHING VESSELS ENTERED IN THE EXTERNAL COASTING TRADE AND VESSELS ENTERED IN THE INTER-PORTAL TRADE WITHIN THE PROVINCE, 1896-1905.

Year ending 31 March.	ENTERED IN THE EXTERNAL COASTING TRADE.		ENTERED IN THE INTER-PORTAL TRADE.		TOTAL ENTERED WITH CARGOES IN THE COASTING TRADE.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1896	561	585,648	1,863	539,345	2,424	1,114,993
1897	574	619,343	1,831	558,091	2,405	1,177,434
1898	582	675,500	1,967	562,536	2,550	1,237,936
1899	586	678,787	2,082	547,267	2,668	1,226,054
1900	592	700,694	1,911	553,401	2,503	1,254,095
1901	622	762,709	1,937	485,398	2,559	1,248,107
1902	711	910,538	1,871	519,600	2,582	1,429,138
1903	676	978,789	2,126	529,429	2,802	1,508,218
1904	663	1,027,822	2,182	626,672	2,845	1,653,494
1905	672	1,146,032	2,389	688,665	3,052	1,834,697

APPENDIX T.

CONTRIBUTION TO A BIBLIOGRAPHY OF BURMA

	PAGE
KEY TO ABBREVIATIONS USED IN THE BIBLIOGRAPHY	975
HISTORY	977
TRADE, COMMERCE, INDUSTRIES, PRODUCTS	980
RELIGION AND ITS SEMBLANCES	982
CENSUS REPORTS	983
GEOGRAPHY, DESCRIPTION, AND TRAVEL	984
RAILWAYS	989
WARS AND PUNITIVE EXPEDITIONS	990
THE PEOPLE OF BURMA: THEIR LIFE, MANNERS, CUSTOMS, ETC. . .	992
MISSIONS	993
FRONTIER AFFAIRS	994
KARENNI AND THE KAREN PEOPLE	995
THE KACHIN HILLS AND THE KACHIN PEOPLE	996
THE SHAN STATES AND THE SHAN PEOPLE	996
ARAKAN AND THE ARAKANESE	997
THE CHIN HILLS AND THE CHIN PEOPLE	997
OFFICIAL PUBLICATIONS	998

APPENDIX T.

CONTRIBUTION TO A BIBLIOGRAPHY OF BURMA

KEY TO ABBREVIATIONS USED IN THE BIBLIOGRAPHY.

A. M.	Atlantic Monthly. Boston, U.S.A.
A. R.	Asiatic Researches. (Published in Calcutta by the Asiatic Society of Bengal, 1788-1836.)
A. R. S. I.	Annual Reports of the Smithsonian Institute. Washington, D.C.
B.	Blackwood's Magazine. Edinburgh.
Bm.	Buddhism. An illustrated quarterly review. Rangoon, Burma.
B. S. G.	Bulletin de la Société de Géographie. Paris.
B. S. G. M.	Bulletin de la Société de Géographie de Marseille.
B. S. L. G.	Bulletin de la Société languedocienne de Géographie. Montpellier, France.
C.	Cornhill Magazine. London.
C. M.	China's Millions.
C. M. and C. M. J.	The Colonial Magazine and Commercial Maritime Journal. London.
C. N. M. M.	Colburn's New Monthly Magazine. London.
C. O.	Christian Observer.
C. R.	Contemporary Review. London.
D. O. R.	Dalrymple's Oriental Repertory. London.
D. R.	Dublin Review. London.
D. R. G.	Deutsche Rundschau für Geographie und Statistik. Wien.
E. R.	Edinburgh Review.
F. M.	Fraser's Magazine.
F. R.	Fortnightly Review. London.
G.	Globus. Illustrierte Zeitschrift für Länder und Völkerkunde, Chronik der Reisen und geographischen Zeitung. Braunschweig, Germany.
G. J.	Geographical Journal. London. (Publication of the Royal Geographical Society.)
G. M.	Gentleman's Magazine. London.
I. A.	Indian Antiquary. Bombay.
I. A. Q. R.	Imperial and Asiatic Quarterly Review and Oriental and Colonial Review. Woking, England.
J. A. F.	Journal of American Folklore. Boston, U.S.A.
J. A. G. S.	Journal of the American Geographical Society. New York.
J. A. O. S.	Journal of the American Oriental Society. New Haven.

- | | |
|------------------------|--|
| J. A. S. B. | Journal of the Asiatic Society of Bengal. Calcutta. |
| J. E. I. A. | Journal of the East India Association. London. |
| J. I. A. | Journal of the Indian Archipelago and Eastern Asia. Singapore. |
| J. M. G. S. | Journal of the Manchester Geographical Society. Manchester, England. |
| J. R. C. I. | Journal of the Royal Colonial Institute. London. |
| J. R. U. S. I. | Journal of the Royal United Service Institution. London. |
| J. S. A. | Journal of the Society of Arts. London. |
| J. R. S. S. | Journal of the Royal Statistical Society of London. |
| J. U. S. I. I. | Journal of the United Service Institution of India. Simla. |
| L. M. | London Magazine. London. |
| L. Q. R. | London Quarterly Review. London. |
| M. F. | Mission Field. |
| M. G. E. B. | Monatsberichte über die Verhandlungen der Gesellschaft für Erdkunde zu Berlin. |
| M. G. G. | Mittheilungen der kaiserlich-königliche geographischen Gesellschaft. Wien. |
| M. G. S. I. | Memoirs of the Geological Survey of India. Calcutta. |
| M. J. L. S. | Madras Journal of Literature and Science. Madras. |
| M. M. | Macmillan's Magazine. London. |
| N. A. R. | North American Review. New York. |
| N. C. | Nineteenth Century. London. |
| (N. F.) | Neue Folge. |
| N. R. | National Review. London. |
| (N. S.) | New Series. |
| O. M. O. | Oesterreichische Monatsschrift für der Orient. Wien. |
| P. | Pinkerton's General Collection of Voyages. 17 vols. London, 1808-1814. |
| P. M. | Petermann's Mittheilungen aus Justus Perthes' geographische Anstalt. Gotha, Germany. |
| P. N. H. S. G. | Proceedings and Transactions of the Natural History Society of Glasgow. |
| P. P. | Purchas his Pilgrimes. 4 vols. London, 1625. |
| P. R. | Prospective Review. |
| P. R. A. I. | Proceedings of the Royal Artillery Institution. Woolwich. |
| P. R. C. I. | Proceedings of the Royal Colonial Institute. London. |
| P. R. G. S. | Proceedings of the Royal Geographical Society. London. |
| Q. R. | Quarterly Review. London. |
| R. d. d. M. | Revue des deux Mondes. Paris. |
| R. G. | Revue de Géographie. Paris. |
| R. G. S. S. P. | Royal Geographical Society. Supplementary Papers. London. |
| S. | Science. New York. |

- S. G. M. Scottish Geographical Magazine. Edinburgh.
 S. M. Scribner's Magazine. New York.
 S. P. C. K. Society for the Propagation of Christian Knowledge.
 London.
 T. M. Tour du Monde. Paris.
 T. R. G. S. A. (V. B.) Transactions and Proceedings of the Victorian Branch
 of the Royal Geographical Society of Australasia.
 Melbourne.
 U. S. M. United Service Magazine. London.
 W. R. Westminster Review. London.
 W. W. World's Work. New York.
 Z. A. E. B. Zeitschrift für allgemeine Erdkunde. (Publication of
 the Gesellschaft für Erdkunde zu Berlin.)
 Z. G. E. B. Zeitschrift der Gesellschaft für Erdkunde zu Berlin.

HISTORY.

- Alves, *Captain Walter*. Proceedings in Ava, on an Embassy, 1760. D. O. R.
 1793. Vol. i. 351-393.
 Account of the Loss of Negrain. D. O. R. 1793. Vol. i. 343-350.
 Anonymous. Account of the English Proceedings at Dagon, 1755. D. O. R.
 1793. Vol. i. 177-200.
 Treaty concluded with the King of Ava, 1757. D. O. R. 1793. Vol.
 i. 223-226.
 Crawford's Embassy to Ava. Q. R. 1829. Vol. xli. 27-53.
 Embassy to the Court of Ava. (Review of John Crawford's "Journal
 of an Embassy from the Governor-General of India to the Court of
 Ava, in the Year 1827.") C. N. M. M. 1829. Vol. xxv. 544-553.
 Burma, Past and Present. (Review of Lieutenant-General Albert
 Fytche's "Burma, Past and Present, with Personal Reminiscences of
 the Country.") L. Q. R. 1878. Vol. i. 284-301.
 The Conquest of Burma. E. R. 1887. Vol. clxv. 489-511.
 Burma, Past and Present. (Review of Sir Arthur Phayre's "History of
 Burma"; Captain Yule's "Narrative of the Mission sent to the Court
 of Ava in 1855"; Sir Arthur Phayre's Paper on British Burma read
 before the Society of Arts, May 27, 1881; "British Burma Gazet-
 teer," 1880; G. T. Bayfield's "Historical Review of the Political Rela-
 tions between the British Government in India and the Empire of Ava"
 (supplement to Pemberton's "Report on the Eastern Frontier of British
 India"); Captain Forbes's "British Burma and its People"; Shway
 Yeo's "The Burman: His Life and Notions"; M. de Lanessan's
 "Rapport fait en nom de la Commission chargée d'examiner le projet
 de loi portant approbation de la convention complémentaire de com-
 merce, signée à Paris le 15 Janvier 1885, entre la France et la Bir-
 manie"; Comte A. Mahé de la Bourdonnais's "Un français en
 Birmanie.") Q. R. 1886. Vol. clxii. 210-238.
 Ardagh, *Major-General R. D.* The Burmese Annexation. J. E. I. A.
 1886. Vol. xviii. 89-127.

- Bayfield, G. T. Historical Review of Political Relations between the British Government in India and the Empire of Ava, from the Earliest Date (supplement to Pemberton's "Report on the Eastern Frontier of British India"). Calcutta, Baptist Mission Press, 1835. pp. 73.
- Boulger, Demetrius C. The Pacification of Burmah. N. R. 1889. Vol. xiii. 503-516.
- Browne, Major Edmond Charles. The Coming of the Great Queen: A Narrative of the Acquisition of Burma. *Maps, Illustrated*. London, Harrison, 1888. pp. 451.
- Burney, Lieutenant-Colonel Henry. The Burmese Revolution. C. M. and C. M. J. 1842. Vol. vii. 71-80, 176-184.
- Baker, Captain George. Journal of his Embassy to the King of the Bûragmahns. D. O. R. 1793. Vol. i. 143-162.
- Observations at Persaim, 1755. D. O. R. 1793. Vol. i. 133-142.
- "Conservative." Our Task in Burmah. F. R. 1887. Vol. xlvii. 376-383.
- Crawford, John. Journal of an Embassy from the Governor-General of India to the Court of Ava in 1827. With an Appendix containing a Description of Fossil Remains, by Professor Buckland and Mr. Clift. 2d ed. London, Colburn, 1834. 2 vols.
- Dalrymple, A. Letter concerning the Negrais Expedition; and concerning the Adjacent Countries. D. O. R. 1793. Vol. i. 97-128.
- "Fielding, H." (H. Fielding Hall). Thibaw's Queen. New York, Harper, 1899. pp. 294.
- Fleetwood, Edward. Embassy of Mr. Edward Fleetwood to Ava, 1695. [Consists of instructions signed by Nathaniel Higginson, Governor of Fort St. George, Mr. Fleetwood's Diary, and other papers.] D. O. R. 1808. Vol. ii. 337-404.
- Forbes, Archibald. The Political Situation in Burmah. N. C. 1879. Vol. v. 740-754.
- Forbes, Captain C. J. F. S. Legendary History of Burma and Arakan. Rangoon, Govt. Press, 1882. pp. 34.
- Forchhammer, E. Notes on the Early History and Geography of British Burma. The First Buddhist Mission to Suvannabhumi. Rangoon, Govt. Press, 1884. pp. 16.
- Fytche, Lieutenant-General Albert. Burma Past and Present, with Personal Reminiscences of the Country. *Map, Illustrated*. London, Kegan Paul, 1878. 2 vols.
- Geary, Grattan. Burma after the Conquest, viewed in its Political, Social, and Commercial Aspects from Mandalay. London, Sampson Low, 1886. pp. 345.
- Grant, Charles. The Burmese Question. C. R. 1886. Vol. xlix. 32-42.
- Hallett, Holt S. Burma, Present and Future. J. S. A. 1885. Vol. xxxiv. 96-110.
- Harmer, Ernest George. The Transformation of Burma. (Review of John Nisbet's "Burma under British Rule—and Before"; Murray's "Handbook to India, Burma, and Ceylon"; "Burma Administration Report, 1899-1900"). L. Q. R. 1902. Vol. xcvii. 53-70.
- The Story of Burma. London, Marshall, [1902?] pp. 204.

- Hunter, Sir W. W. British Burma and Independent Burma. In "Imperial Gazetteer of India." London, Trübner, 1885. Vol. iii. 167-229.
- Ireland, Alleyne. The Far Eastern Tropics: Studies in the Administration of Tropical Dependencies. Boston, Houghton, Mifflin, 1905. pp. vii. + 339.
- The British Empire in the Far East. P. R. C. I. Vol. xxxvi. pp. 365-396.
- Lanessan, M. de, *Député*. Rapport fait au nom de la Commission chargée d'examiner le projet de loi portant approbation de la convention complémentaire de commerce, signée à Paris le 15 Janvier 1885, entre la France et la Birmanie. Paris, 1885.
- Lestor, *Ensign*. Embassy to the King of Ava, 1757. D. O. R. 1793. Vol. i. 201-222.
- MacMahon, *Major-General* Alexander Ruxton. Matters in Burmah. M. M. 1886. Vol. liii. 314-320.
- The Situation in Burma. N. R. 1885. Vol. vi. 254-265.
- Through Burma to China; and French Susceptibilities. U. S. M. (N.S.) 1896. Vol. xii. 363-371.
- Nisbet, John. Burma under British Rule—and Before. London, Constable, 1901. 2 vols. pp. x + 460 and viii + 452.
- Pemberton, *Captain* R. Boileau. Report on the Eastern Frontier of British India; with an Appendix; and a Supplement by Dr. Bayfield on British Political Relations with Ava. *Maps*. Printed by order of the Supreme Government of India. Calcutta, Baptist Mission Press, 1835. pp. 261 + [23] + 73.
- Phayre, *Lieutenant-General* Sir Arthur P. History of Burma, including Burma Proper, Pegu, Taungu, Tenasserim, and Arakan. From the earliest time to the end of the first war with British India. *Map*. London, Trübner, 1883. pp. xii + 311. (*Half-title*: Trübner's Oriental Series.)
- Riley, J. Horton. Ralph Fitch, England's Pioneer to India and Burma. His Companions and Contemporaries. With his remarkable narrative told in his own words. *Illustrated*. London, Fisher Unwin, 1899. pp. xvi + 258.
- Saunders, *Governor* [of Madras]. The Consequence of Settling an European Colony on the Island of Negrais. *Map*. D. O. R. 1793. Vol. i. 129-132.
- Scott, Sir James George. Burma as it was, as it is, and as it will be. London, Redway, 1886. pp. 184.
- Symes, *Lieutenant-Colonel* Michael. An Account of an Embassy to the Kingdom of Ava sent by the Governor-General of India in the Year 1795. *Illustrated, Maps*. London, 1800. Quarto. pp. xxiii + 503.
- An Account of an Embassy to the Kingdom of Ava in the Year 1795, to which is now added A Narrative of the late Military and Political Operations in the Burmese Empire. Edinburgh, Constable, 1827. 2 vols. pp. 312 and 320.
- Temple, Sir Richard. Cosmopolitan Essays. *Maps*. London, Chapman & Hall, 1886. [Chapter x. pp. 202-259, "The Politics of Burma."]

- Wheeler, J. T. *A Short History of India and Afghanistan, Nipal, and Burma.* London, Macmillan, 1880.
- White, Sir Herbert Thirkell. *Upper Burma under British Rule.* J. S. A. 1893. Vol. xli. 150-166.
- Yule, Captain Sir Henry. *A Narrative of the Mission sent by the Governor-General of India to the Court of Ava in 1855, with Notices of the Country, Government, and People.* *Maps, Illustrated.* London, Smith, Elder, 1858. pp. viii + 391.

TRADE, COMMERCE, INDUSTRIES, PRODUCTS.

- Anonymous. *Report on the Fisheries in the Henzada District.* *Maps, Illustrated.* Rangoon, Govt. Press, 1886. pp. 37.
- Bowers, Captain Alexander. *Bhamo Expedition. Report on the Practicability of Reopening the Trade Route between Burma and Western China.* *Maps, Illustrated.* Rangoon, American Mission Press, 1869. pp. 165.
- Coryton, John. *Trade Routes between British Burmah and Western China.* *Maps.* J. R. G. S. 1875. Vol. xlv. 229-249.
- Letter to the Liverpool Chamber of Commerce on the Prospects of a Direct Trade Route to China through Moulmein. With an Appendix containing Suggestions for Amendments in the Law relating to Foreign-grown Salween-borne timber, and a Scheme for the Prevention of Frauds in the Timber Trade of Moulmein and the Adjustment of Disputes between Foresters and Forest Chiefs. Moulmein, Advertiser Press, 1870. pp. 102 + xlvii.
- Cox, Captain Hiram. *An Account of the Petroleum Wells in the Burmese Dominions.* A. R. 1799. Vol. vi. 127-136.
- Gordon, Robert. *Ruby Mines near Mogok, Burma.* *Map.* P. R. G. S. 1888. Vol. x. (N. S.) 261-272.
- The Ruby Mines of Burma.* *Map.* I. A. Q. R. 1889. Vol. vii. 410-423.
- Hardiman, J. P. *Silk in Burma.* Rangoon, Govt. Press, 1901. pp. 57.
- Huddersfield Chamber of Commerce. *Commerce with the Shan States and West of China by Railway Direct from Rangoon to Kiang-Hung on the Upper Kamboja River on the South-west Frontier of China.* From the Huddersfield Chamber of Commerce to the Lords of Her Majesty's Treasury. Huddersfield, 1869. pp. 32.
- Laurie, Colonel W. F. B. *Ashé Pyee, the Superior Country; or, The Great Attractions of Burma to British Enterprise and Commerce.* London, Allen, 1882. pp. 283.
- British and Upper Burma and Western China: Their Concurrent Commercial Interests.* J. S. A. 1879-80. Vol. xxviii. 640-644.
- MacMahon, Major-General Alexander Ruxton. *Burmese Border Tribes and Trade Routes.* B. 1886. Vol. cxl. 394-407.
- Marvin, Charles. *The Oil Wells of Burma.* N. R. 1889. Vol. xiv. 341-348.
- England as a Petroleum Power, or the Petroleum Fields of the British Empire.* London, R. Anderson, [1887?] pp. xi + 32.

- Mason, *Rev. F.* On the Gamboge of the Tenasserim Provinces. J. A. S. B. 1847. Vol. xvi. 661-663.
- Noetling, *Dr. Fritz.* The Occurrence of Petroleum in Burma, and its Technical Exploitation. M. G. S. I. 1897. Vol. xxvii. 1-226.
- O'Riley, Edward. Remarks on the Metalliferous Deposits and Mineral Productions of the Tenasserim Provinces. J. I. A. 1849. Vol. iii. 724-743.
- The Vegetable Products of the Tenasserim Provinces. J. I. A. 1850. Vol. iv. 55-65.
- Paget, *Mrs. Henry Clarence.* The Ruby Mines of Upper Burma. C. 1901. Vol. lxxxiv. 812-824.
- Palmer, John Williamson. Petroleum in Burmah. A. M. 1868. Vol. xxii. 404-413.
- Parker, Edward Harper. The Burma-China Trade Convention. I. A. Q. R. 1897. Vol. iv. (3d series) 27-34.
- The Keng-Hung Contention—Upper Mekong Trade. I. A. Q. R. 1898. Vol. v. (3d Series) 39-55.
- Piddington, H. On a New Kind of Coal, being Volcanic Coal, from Arracan. J. A. S. B. 1847. Vol. xvi. 371-373.
- Pratt, H. S. Monograph on Ivory Carving in Burma. Rangoon, Govt. Press, 1901. pp. 6.
- Schlagintweit, Emil. Der Nordland von Birma und der neue Handelsweg nach dem Innern von China. G. 1866. Vol. x. 118-122.
- Wirthschaftliche Aussichten in Ober-Birma. O. M. O. 1886. Vol. xii. 117-120.
- Der Handel mit Britisch-Birma. O. M. O. 1883. Vol. ix. 185-188.
- Shearer, Johnston. On the Manufacture of Paper from the Bark of Trees in Upper Burmah. P. N. H. S. G. 1889-92. Vol. iii. (N. S.) 256-257.
- Sladen, *Major Sir E. B.* Trade through Burmah to China. An address read to the Glasgow Chamber of Commerce, . . . with a Map and Preface by John M'Call, late President of the Chamber of Commerce at Rangoon, British Burma. Glasgow, McLaren & Erskine, 1870. pp. 32.
- Sprye, *Captain Richard.* Commerce with Western and Interior China, Thibet, and Tartary, across British Pegue from the Port of Rangoon to Esmok on the South-western Frontier of China Proper, with Introduction and Notices by the Press. London, Privately printed, 1860.
- Sprye, *Captain Richard,* and Sprye, R. H. F. Aërial Telegraph to Hong Kong and the Open Ports of China, and a New Commerce with the Vast West of that Empire across Eastern Pegue from Rangoon. London, Privately printed, 1862.
- Streeter, G. Skelton. The Ruby Mines of Burma. J. S. A. 1889. Vol. xxxvii. 266-271.
- The Ruby Mines of Burma. J. M. G. S. 1887. Vol. iii. 216-220.
- Strettell, G. W. The *Ficus Elastica* in Burma Proper; or, A Narrative of my Journey in Search of it: a Descriptive Account of its Habits of Growth and the Process followed by the Kakhyens in the Preparation of Caoutchouc, accompanied by a Map showing the Geographical Dis-

- tribution of the Tree in Assam and Burma Proper. Rangoon, Govt. Press, 1876. pp. 222.
- Tilly, H. L. Wood-carving of Burma. *Illustrated*. Rangoon, Govt. Press, 1903. pp. 14.
- Glass Mosaics of Burma. *Illustrated*. Rangoon, Govt. Press, 1901. pp. 12.
- Turner, W. Brief Account of the Trade of Arracan, 1761. D. O. R. 1793. Vol. i.
- Vossion, Louis. Rapport sur la possibilité d'établir des relations commerciales entre la France et la Birmanie. Paris, 1879.
- Williams, Clement. Trade and Telegraph Routes to China, via Burmah. *Map*. [Mandalay, 1864?] pp. 37.
- Memorandum on the Question of British Trade with Western China via Burmah. *Map*. London, 1864.
- Through Burmah to Western China, being Notes of a Journey in 1863 to establish the Practicability of a Trade Route between the Irawaddi and the Yang-tse-Kiang. *Map, Illustrated*. Edinburgh, Blackwood, 1868. pp. 213.

RELIGION AND ITS SEMBLANCES.

- Anonymous. The Thathanabaing. [A long article written on the occasion of the recognition by the British Government in 1903 of the Taung-gwin Sayadaw as Thathanabaing of Upper Burma. Gives a history of the office.] Bm. 1903. Vol. i. No. ii. 177-208.
- The Religion of Burma. (Reviews of T. W. Rhys Davids's "Buddhism: Being a Sketch of the Life and Teaching of Gautama, the Buddha"; Max Müller's "Chips from a German Workshop"; J. H. Oldenburg's "Buddha: His Life, Doctrine, and Order.") L. Q. R. 1887. Vol. lxvii. 283-297.
- Bigandet, Rev. P. Legend of the Burmese Budha, called Gaudama. J. I. A. 1852-53. Vol. vi. 278-289, 499-520; vol. vii. 159-185; vol. viii. 349-364, 373-385.
- Some Account of the Order of Buddhist Monks of Talapoints. J. I. A. 1850. Vol. iv. 220-231, 505-529.
- The Ways to Neibban, and Notice on the Burmese Monks. London, 1880. 2 vols.
- Bourdonnais, Graf A. Mahé de la, and Marcel G. Der Buddhismus in Birma. D. R. G. 1887. Vol. ix. 7-15.
- Griffin, Sir Lepel. The Burman and his Creed. F. R. 1890. Vol. liv. 657-673.
- Mason, Francis. Mulamuli, or the Buddhist Genesis of Eastern India, from the Shan, through the Talaing and Burman. J. A. O. S. 1854. 105-116.
- Hints on the Introduction of Buddhism into Burmah. J. A. O. S. 1851. Vol. ii. 334-337.
- O'Riley, Edward. On the Spirit (Nat or Dewah) Worship of the Talines. J. I. A. 1850. Vol. iv. 591-597.

- Scott, Sir James George (Shway Yeo). *Buddhists and Buddhism in Burma*. C. 1880. Vol. xlii. 721-731.
- The Burman: His Life and Notions. London, Macmillan, 1896. pp. 603.
- Gazetteer of Upper Burma and the Shan States. Rangoon, Govt. Press. 1900.
- Spearman, Horace Ralph. *The British Burma Gazetteer*. Rangoon, Govt. Press, 1879-80.
- Taw Sein Ko. *The Introduction of Buddhism into Burma*. Bm. 1904. Vol. i. No. iv. 585-603.
- Vossion, Louis. *Nat-worship among the Burmese*. J. A. F. 1891. Vol. iv. 107-114.

CENSUS REPORTS.

- Report on the Census of British Burma taken in August, 1872. Rangoon, Govt. Press, 1875. Folio. pp. 2 + iii + 34 + 19 + 5 + 6 + lxxv. ("The first regular Census ever made of this Province.")
- Report on the Census of British Burma. Taken on the 17th February 1881. Accompanied by Map. Rangoon, Govt. Press, 1881. Folio. pp. v + 96 + 2 + ccxii + 86.
- Government of India. Census of 1891. Imperial Series, vol. ix. *Burma Report*, vol. i. Operations and Results, with two maps, four diagrams, and four appendices. By H. L. Eales, I.C.S., Provincial Superintendent of Census Operations. Rangoon, Govt. Press, 1892. Folio. pp. 2 + v + 298 + cxlvi.—Imperial Series, vol. x. *Burma Report*, vol. ii. Rangoon, Govt. Press, 1892. Folio. pp. 2 + 665.—*Burma Report*, vol. iii. Containing District, Township, Circle, and Village Tables of Lower Burma. Rangoon, Govt. Press, 1892. Folio. pp. x + 684.—*Burma Report*, vol. iv. Containing District, Township, Circle, and Village Tables of Upper Burma. Rangoon, Govt. Press, 1892. Folio. pp. xviii + 701.
- Census of India. 1901. Vol. xii. *Burma*. Part I. Report. By C. C. Lewis, I.C.S., Superintendent Census Operations. Rangoon, Govt. Press, 1902. Folio. pp. 4 + 151 + lxxxiii + v.—Vol. xiiA *Burma*. Part II. Imperial Tables. By C. C. Lewis, I.C.S., Superintendent, Census Operations. Rangoon, Govt. Press, 1902. Folio. pp. 431.
- Census of India. 1901. Administrative Volume with Appendices. Calcutta, Govt. Press, 1903. Folio. pp. 436.
- Census of India. 1901. Ethnographic Appendices. By H. H. Risley, I.C.S., C.I.E. Calcutta, Govt. Press, 1903. Folio. pp. iii + 251.
- Census of India. 1901. General Report of the Census of India, 1901. London, Printed for His Majesty's Stationery Office by Darling & Son, Ltd. 1904. Folio. pp. xxv + 582.

GEOGRAPHY, DESCRIPTION, TRAVEL.

- Alcock, *Sir Rutherford*. The Journey of Augustus Raymond Margary from Shanghai to Bhamo and back to Manwyne. From his Journals and Letters, with a brief biographical preface. London, Macmillan, 1876. pp. 382.
- "An American." The Golden Dagon, or up and down the Irrawaddi, being Passages of Adventure in the Burman Empire. London, Sampson Low, 1856. pp. 311.
- Anderson, *Dr. John*. Mandalay to Momien: A Narrative of the Two Expeditions to Western China of 1868 and 1875 under Colonel Edward B. Sladen and Colonel Horace Browne. *Maps, Illustrated*. London, Macmillan, 1876. pp. 479.
- Anonymous. Letters from the Banks of the Irawadee. B. 1856. Vol. lxxix. 536-561.
- Our New Eastern Provinces. [Upper Burma.] B. 1886. Vol. cxxxix. 280-291.
- Burmah and the Burmese. B. 1859. Vol. lxxxv. 31-48.
- Coup d'œil sur les provinces d'Ava cédées aux anglais par le dernier traité de paix. B. S. G. 1826. Vol. vi. 181-209.
- Two Years in Ava, from May 1824 to May 1826. By an officer on the staff of the Quartermaster-General's Department. *Maps*. London, John Murray, 1827. pp. 449.
- Bastian, *Dr. Adolph*. Die Völker des östlichen Asien: Studien und Reisen. Vol. ii. Reisen in Birma in den Jahren 1861-62. Leipzig, 1866.
- Bernard, *Sir Charles*. Burma, the New British Province. S. G. M. 1888. Vol. iv. 65-81.
- Biggs, T. Hesketh. The Shwe Dagon Pagoda, Rangoon. Rangoon, The Hanthawaddy Press, 1895. pp. 61.
- Bird, G. W. Wanderings in Burma. *Maps, Illustrated*. London, Simpkin Marshall, 1897. pp. 410.
- Blume, F. Ausflug auf dem Flusse Salween in Hinterindien im Feb. 1845. M. G. E. B. 1846. Vol. iii. (Ser. 2) 218-233; vol. vii. (Ser. 2) 226-239.
- Reise von Mergui nach Moulmain in Hinter-Indien. M. G. E. B. 1849. Vol. vi. (Ser. 2) 226-231.
- Böck, *Dr. K.* A Mandalay, la dernière capitale des Rois de Birmanie. *Illustrated*. T. M. 1903. Vol. ix. 553-564.
- Bourgogne, Lucien. En Birmanie [in "Autour du Monde," pp. 27-71]. Paris, Alcan, 1904.
- Browne, *Captain Edmond*. Upper Burma: Its Defences and Warlike Resources. *Maps*. J. R. U. S. I. 1875. Vol. xix. 588-603.
- The Kingdom of Burmah in 1875. F. M. 1875. Vol. xcii. 224-232.
- Bryce, J. Annan. Burma: The Country and People. P. R. G. S. (N. S.) 1886. Vol. viii. 481-499.
- Burma: The Latest Addition to the Empire. P. R. C. I. 1885-86. Vol. xvii. 180-209.

- Cadell, Henry M. A Sail down the Irrawaddy. *Illustrated*. S. G. M. 1901. Vol. xvii. 239-265.
- Carey, Lieutenant E. S. Diary of Second Lieutenant E. S. Carey, Intelligence Officer, Jade Mines Escort. *Maps*. Rangoon, Govt. Press, 1896. pp. 26.
- Carey, Colonel W. Report of a Visit to Mandalay and the Irrawaddy Forts, Upper Burma. P. R. A. I. 1886. Vol. xv. No. 2, 69-82.
- Cavaglion, E. Quinze jours en Birmanie. *Illustrated*. T. M. 1892. Vol. lxiv. 385-400.
- Clerke, E. M. Burma and the Farther East. (Review of Henry Yule's "Mission to the Court of Ava"; Sir Arthur Phayre's "History of Burma"; A. R. Colquhoun's "Across Chryse" and "Burma and the Burmans"; Captain Forbes's "British Burma and its People"; Shway Yoe's "The Burman: His Life and Notions"; Dr. Adolf Bastian's "Reisen in Birma.") D. R. 1886. Vol. xcvi. 309-340.
- Clifford, Hugh, C.M.G. Further India. [Serial title: "The Story of Exploration." Edited by J. Scott Keltie, LL.D., Sec. R. G. S.] London, Lawrence & Bullen, 1904. pp. 367.
- Cochrane, Henry Park. Among the Burmans: A Record of Fifteen Years of Work and its Fruitage. *Illustrated*. New York, Revell, [1904?] pp. 291.
- Cotes, Everard Charles. With Lord Curzon in Burma. N. R. 1902. Vol. xxxix. 122-132.
- Cotes, Mrs. Everard Charles. In Burma with the Viceroy. S. M. 1902. Vol. xxxii. 58-72.
- Cox, Captain Hiram. Journal of a Residence in the Burmhan Empire, and more particularly at the Court of Amarapoorah. *Illustrated*. London, J. Warren, 1821. pp. 431.
- De la Bourdonnais, Comte A. Mahé. Un français en Birmanie: notes de voyage. 3d ed. *Map*. Paris, 1886.
- Deetjen, C. Burmah. Z. G. E. B. 1874. Vol. ix. 133-151.
- Ellis, Beth. An English Girl's First Impressions of Burmah. 2d ed. London, Simpkin Marshall, 1899. pp. 248.
- Fenton, Major A. B. Diary of an Expedition to the Upper Reaches of the Irrawaddy, and subsequently to the Indawgyi Lake, in May and June 1890. *Map*. Rangoon. 1890.
- Ferrars, Max, and Ferrars, Bertha. Burma. *Map, Illustrated*. London, Low, Marston, 1900. pp. 237.
- Fitch, Ralph. Fitch's Voyage to Pegu. P. 1811. Vol. ix. 406-425.
- Francklin, William. Tracts, Political, Geographical, and Commercial, on the Dominions of Ava and the North-western Parts of Hindostan. London, Cadell & Davies, 1811. pp. 281.
- Fryer, Sir Frederick. Burma. J. S. A. 1905. Vol. lili. 153-166.
- Fytche, Lieutenant-General Albert. Burma. F. R. 1879. Vol. xxxi. 627-635.
- Burma, Past and Present, with Personal Reminiscences of the Country. London, Kegan Paul, 1878. 2 vols. pp. 355 and 348.
- Gallois, Eugène. En Birmanie. *Illustrated*. Paris, Delagrave, 1899. pp. 118.

- Gascoyne, Gwendolen Trench. *Among Pagodas and Fair Ladies. An Account of a Tour through Burma.* London, Innes, 1896. pp. 312.
- Gill, Captain W. *The River of Golden Sand: The Narrative of a Journey through China and Eastern Tibet to Burmah, with an Introductory Essay by Colonel Henry Yule. Maps, Illustrated.* London, Murray, 1880. 2 vols.
- The Same. Condensed by Edward Colbourne Baker. Edited, with a Memoir and Introductory Essay, by Colonel Henry Yule. *Map, Illustrated.* London, Murray, 1883.
- Gonnaud, P. *Aperçus sur la Birmanie. Le pays, les habitants, les voies de communication, la politique anglaise.* R. G. 1903. Vol. liii. 511-524.
- Gordon, Charles Alexander. *Our Trip to Burmah, with Notes on that Country. Map, Illustrated.* London, Baillière, Tindall & Cox, 1876. pp. 265.
- Gouger, Henry. *A Personal Narrative of Two Years' Imprisonment in Burma, 1824-26. Illustrated.* London, Murray, 1860. pp. xi. + 327.
- Gray, J. Errol. *Diary of a Journey to the Bor Khamti Country and Sources of the Irrawaddy, made by Mr. J. Errol Gray, Season 1892-93, from Assam.* Simla, Govt. Press, 1893. pp. 77.
- Hart, Mrs. Ernest. *Picturesque Burma, Past and Present. Map, Illustrated.* London, Dent, 1897. pp. xiv + 400.
- Havet, Alfred R. *La Birmanie et la Chine méridionale, d'après les documents anglais. Avec deux notices générales sur le commerce de la Birmanie anglaise, par L. Vossion.* Paris, Société académique indochinoise, 1885. pp. 59.
- Helfer, Dr. J. W. *Travels of Doctor and Madame Helfer in Syria, Mesopotamia, Burmah, and Other Lands. Narrated by Pauline, Countess Nostitz (formerly Madame Helfer), and rendered into English by Mrs. George Struge.* London, 1878. 2 vols.
- Schriften über die Tenasserim Provinzen, dem Mergui-Archipel, und die Andaman-Inseln.* (Translated from the English by A. von Marschall. Preface by F. Fötterle.) Vienna, M. Auer, 1860. pp. 224.
- Hellwald, Friedrich von. *Hinterindische Länder und Völker. Reisen in den Flussgebieten des Irawaddy und Mekong; in Annam, Kambodscha, und Siam.* Leipzig, Otto Spamer, 1876. pp. 358.
- Hordern, P. *Among the Burmese.* F. M. 1878. Vol. xcix. pp. 85, 245, 296, 471, 599, 758.
- Hunter, W. *A Concise Account of the Climate, Produce, Trade, Government, Manners, and Customs of the Kingdom of Pegu, interspersed with Remarks Moral and Political.* London, 1789. pp. 110.
- Joest, W. *Ein Besuch beim Könige von Birma.* Köln, 1882.
- Johnstone, William A. *From Canton to Mandalay.* F. R. 1898. Vol. lxi. 264-279.
- Katherine, Sister. *Towards the Land of the Rising Sun; or, Four Years in Burma.* London, Society for Promoting Christian Knowledge, 1900. pp. 160.

- Kreitner, G. Im fernen Osten. Reisen des Grafen Bela Széchenyi in Indien, Japan, China, Tibet, und Birma in den Jahren 1877-80. *Maps, Illustrated.* Vienna, 1881.
- Laurie, Colonel W. F. B. Papers on Burmah. London, Wilkins, 1870. pp. 52.
- Ashé Pyee, the Superior Country, or the Great Attractions of Burma to British Enterprise and Commerce. London, Allen, 1882. pp. 283.
- MacMahon, Major-General Alexander Ruxton. Burma and the Burmese. N. R. 1886. Vol. viii. 332-350.
- Far Cathay and Further India. *Illustrated.* London, Hurst & Blackett, 1893. pp. 340.
- Malcom, Rev. Howard. Travels in South-eastern Asia . . . and a Full Account of the Burman Empire. *Map.* London, Charles Tilt, 1839. 2 vols. pp. 324 and 364.
- Travels in the Burman Empire. Edinburgh, Chambers, 1840. pp. 82.
- Marshall, W. H. Four Years in Burma. London, Charles J. Skeet, 1860. 2 vols. pp. 322 and 307.
- Mason, Rev. F. Burmah: Its People and Natural Productions; or, Notes on the Nations, Flora, Fauna, and Minerals of Tenasserim, Pegu, and Burmah, with Catalogues of the Known Mammals, Birds, Fish, Reptiles, etc., with Vernacular Names. London, Trübner, 1860. pp. xvii + 913.
- The Same. Rewritten and enlarged by W. Theobald. Hertford, Stephen Austin & Sons, 1882. 2 vols. pp. 560 and 787.
- Massieu, Isabelle. Une colonie anglaise: Birmanie et États Shans. R. d. d. M. 1899. 377-416.
- Moore, J. Birman Empire. Coloured Views of Rangoon, with Descriptive Notes. London, Kingsbury & Co. and T. Clay, 1825. 40 pp. + 18 plates. Folio.
- Nangle, Captain M. C. The Burma Route Book. Calcutta, Govt. Press, 1904. pp. 206.
- Neumann, Dr. K. Der Irawadi. *Map.* Z. A. E. B. 1858. Vol. v. (N. F.) 359-365.
- O'Connor, V. C. Scott. The Silken East: A Record of Life and Travel in Burma, . . . with 400 illustrations, including 20 coloured plates. 2 vols. London, Hutchinson, 1904.
- O'Riley, Edward. Rough Notes on the Geological and Geographical Characteristics of the Tenasserim Provinces. J. I. A. 1849. Vol. iii. 385-401.
- Ortel, F. O. Note on a Tour in Burma in March and April 1892. *Maps, Photos.* Rangoon, Govt. Press, 1893. pp. 23.
- Palmer, John Williamson. Up and down the Irrawaddi, or The Golden Dagon, being Passages of Adventure in the Burman Empire. New York, Rudd & Carleton, 1859. pp. 311.
- Paske, Surgeon-General, C. T. Myamma: A Retrospect of Life and Travel in Lower Burma. London, Allen, 1893. pp. 265.
- Pepys, Hon. Walter Courtenay. A Visit to the King of Burmah. C. N. M. M. 1868. Vol. cxliii. 526 and 643.

- Phayre, *General Sir Arthur*. *British Burma*. J. S. A. 1880-81. Vol. xxix. 580-586.
- "Pinya." An Interesting but Little-known Chinese Corner of British India. [Relates to Kokang, a small Chinese district in the Eastern Shan States.] I. A. Q. R. 1903. Vol. xvi. 337-349.
- Purchas, Samuel. *Jocans Posteritie seated in the East Parts of Asia*, amongst them, Ophir in India ultra Gangem, where Chryse was of old, and now is the Kingdom of Pegu, and the Regions Adjoining. P. P. 1625. Part I. Vol. i. Book I. 31-35.
- Ritchie, Leitch. *The British World in the Far East*. [Chap. ii. of vol. ii. is entitled "The Burman Empire and Siam."] London, Allen, 1847.
- Rowley, Rev. Henry. *Burmah*. [In "The Emigrant and the Heathen," by the Rev. J. J. Halcombe. London, S. P. C. K., 1876.]
- Sandeman, *Major J. E.* *The River Irawadi and its Sources*. P. R. G. S. Vol. iv. (N. S.), 1882, 257-273.
- Sangermano, *Rev. Father*. *A Description of the Burmese Empire*, compiled chiefly from Native Documents. (Translated by William Tandy.) Rangoon, Govt. Press, 1885. pp. 228.
- The Burmese Empire a Hundred Years Ago*. With an Introduction and Notes by John Jardine. Westminster, Constable, 1893. pp. 308.
- Schlagintweit, *Émil*. *Ober-Birma, die neue englische Provinz in Hinterindien*. *Illustrated*. D. R. G. 1886. Vol. viii. 342-349.
- Geographische Vorschungs-Ergebnisse aus Ober-Birma*. G. 1890. Vol. lviii. 145-150.
- Schmitz, *Dr. H.* *Burma, die östlichste Provinz des indischen Kaiserreiches*. Nach englischen Quellen und eigenen Beobachtungen von Dr. H. Schmitz. M. G. G. 1898. Vol. xli. 664-705.
- Scott, *Sir James George* (Shway Yoe). *Burma as it was, as it is, and as it will be*. London, Redway, 1886. pp. 184.
- Burma: The Eastern Country and the Race of the Brahmas*. J. S. A. 1886. Vol. xxxiv. 177-191.
- The Burman: His Life and Notions*. London, Macmillan, 1896. pp. 603.
- Burma: A Handbook of Practical Information*. *Map, Illustrations*. London, Moring, 1906. pp. x + 520.
- Shoemaker, *Michael Meyers*. *Quaint Corners of Ancient Empires, Southern India, Burma, and Manila*. New York, Putnam, 1899. pp. xix + 212.
- Soubeiran, *J. L.* *La Birmanie et les Birmans*. B. S. L. G. 1881. Vol. iv. 74-110.
- Symes, *Captain, afterwards Lieutenant-Colonel Michael*. *On the City of Pegue, and the Temple of Shoemadoo Praw*. A. R. 1798. Vol. v. 111-122.
- Vincent, *Frank*. *The Land of the White Elephant: Sights and Scenes in South-eastern Asia. A Personal Narrative of Travel and Adventure in Farther India, embracing the Countries of Burma, Siam, Cambodia, and Cochin-China (1871-72)*. London, Sampson Low, 1873. pp. 316.
- Two Months in Burmah*. J. A. G. S. 1876. Vol. viii. 162-187.

- Vossion, Louis. Relations sur la Birmanie. *Map.* B. S. G. M. 1878. Vol. ii. 317-326.
- Wheeler, J. Talboys. Journal of a Voyage up the Irrawaddy to Mandalay and Bhamo. London, Trübner, 1871. pp. 102.
- White, Sir Herbert Thirkell. Upper Burma under British Rule. J. S. A. 1893. Vol. xli. 150-160.
- Wilson, David. The Converted Dacoit: An Episode in Real Life in Burma. W. R. 1905. Vol. clxiii. 544-550.
- Winston, W. R. Four Years in Upper Burma. London, C. H. Kelly, 1892. pp. 266.
- Winter, Christopher Tatchell. Six Months in British Burma, or India beyond the Ganges in 1837. *Illustrated.* London, Bentley, 1858. pp. xii + 285.
- Woodthorpe, Colonel R. G. Explorations on the Chindwin River, Upper Burma. *Map, Illustrated.* P. R. G. S. 1889. Vol. xi. (N. S.) 197-215.
- Younghusband, Lieutenant G. J. Eighteen Hundred Miles on a Burmese Tat through Burma, Siam, and the Eastern Shan States. *Map, Illustrated.* London, Allen, 1888. pp. 162.
- Yule, Colonel Henry. Geography of Burma and Pegu. *Map.* J. R. G. S. 1857. Vol. xxvii. 54-108.

RAILWAYS.

- Cokquhoun, Archibald R. Report on the Railway Connection of Burmah and China, with an Account of an Exploration Survey by Holt S. Hallett, accompanied by Surveys, Vocabularies, and Appendices. *Maps, Illustrated.* London, Allen & Scott, [1884?] pp. 239.
- The Railway Connection of Burmah and China. *Map.* J. M. G. S. 1887. Vol. iii. 141-153.
- Fraser, Alexander. Note by the Secretary to the Chief Commissioner, British Burmah, in the Public Works Department, on a Proposal, by Colonel Fraser, the Chief Engineer, to promote the Construction of a Railway from Rangoon to Prome, with a Covering Despatch from Colonel Albert Fytche, Chief Commissioner of British Burmah. Rangoon, Govt. Press, 1867. pp. 9 + 4.
- Hallett, Holt S. The Remedy for Lancashire. A Burma-China Railway. B. 1892. Vol. clii. 348-363.
- Address upon Burmah, our Gate to the Markets of Western and Central China, treating with the Proposed Connection of Burmah with China by Railway. Delivered before the Birmingham Chamber of Commerce on 26th May, 1887. London, P. S. King, 1887.
- Exploration Survey for a Railway Connection between India, Siam, and China. J. M. G. S. 1885. Vol. i. 162-164.
- The Burmah-Siam-China Railway. B. 1889. Vol. cxlvi. 647-659.
- Hebbert, F. B. A Memorandum regarding Possible Developments of the Burma Railways System, prepared for the Information of the Rangoon Chamber of Commerce. Bengal Chamber of Commerce Report for 1898-99. Calcutta, W. Newman, 1899. pp. 656-664.

- Huddersfield Chamber of Commerce. Commerce with the Shan States and West of China, by Railway Direct from Rangoon to Kiang-Hung, on the Upper Kamboja River, on the South-west Frontier of China. Memorial No. 50 thereon. From the Huddersfield Chamber of Commerce to the Lords of Her Majesty's Treasury, April 1869. Huddersfield, 1869. pp. 32.
- Laurence, J. T. Notes on Railways in Ceylon and Burmah. *Map, Illustrated*. "Railway Magazine." 1899. Vol. v. p. 136.
- MacLeod, Captain W. C. Copy of Papers relating to the Route of Captain W. C. MacLeod from Moulmein to the Frontiers of China, and to the Route of Dr. Richardson on his Fourth Mission to the Shan Provinces of Burmah, or Extracts from the Same. *Map*. London, 1869.
- Nisbet, John. Railways in Burma, and their Proposed Extension across Yunnan. J. S. A. 1899. Vol. xlvii. 173-190.
- "Old Arakan" (Hay, John Ogilvy). Indo-Burma-China Railway Connections a Pressing Necessity. With a Few Remarks on Communications in and with Burma Past and Present. *Map*. London, E. Stanford, 1888. pp. 73.
- Sheriff, William. The Northern Shan States of Burma and the Burma-China Railway. J. S. A. 1890. Vol. xxxix. 353-361.
- Sprye, R. H. F. and C. H. F. The British and China Railway, from H. M. Port of Rangoon, in the Bay of Bengal, through Pegue and Burmah to the Yunnan Province of China, with Loop-lines to Siam and Cambogia, Tonquin, and Cochin China. *Map*. London, 1858.
- Turk, J. C. Building an American Bridge in Burma. *Illustrated*. W. W. 1901. Vol. ii. 1148-1167.
- Willey, D. A. The Erection of the Gokteik Bridge. A. R. S. I. 1901. 611-615.
- Williams, Captain J. M. Copy of Memorandum by Captain Williams, Inspector of Public Works, Rangoon, British Burmah, upon Railway Communication between Rangoon and Western China, with Map relating thereto. London, British Parliamentary Paper, 1865. pp. 21.

WARS AND PUNITIVE EXPEDITIONS.

- "An Officer." Six Months at Martaban during the Burmese War, and an Essay on the Political Causes which led to the Establishment of British Power in India. By an officer in active service on the spot. [War of 1852.] London, Partridge, Oakey. No date. pp. 131.
- Anonymous. The Burmah War [1852]. C. N. M. M. 1852. Vol. xcv. 360-378.
- With the Royal Welsh Fusiliers in the Third Burmese War, 1885-86-87. By an officer of the regiment. U. S. M. 1888. Vol. i. (N.S.) 682-699; vol. ii. (N.S.) 724, 211-223.
- Birmah. (A Review of Major Snodgrass's "Narrative of the Burmese War, . . . 1824.") L. M. 1827. Vol. vii. (N. S.) 232-244.

- The Arracan Expedition, 1825. From the Diary of an Artillery Officer. *Map*. P. R. A. I. 1900. Vol. xxvii. 65-74.
- Two Years in Ava. From May 1824 to May 1826. By an officer on the staff of the Quartermaster-General's Department. London, Murray, 1827. pp. 455.
- Ardagh, *Major-General* R. D. Recent Annexation of Upper Burmah, with Some Notice of Two Previous Annexations. J. E. I. A. 1886. Vol. xviii. 89-127.
- Baker, Thomas Turner. The Recent Operations of the British Forces at Rangoon and Martaban. *Illustrated*. London, Hatchard, 1852. pp. vii + 78.
- Boulger, Demetrius C. The Pacification of Burmah. N. R. 1889. Vol. xiii. 503-516.
- Chamier, *Captain*. Account of the Burmese War of 1824. (In vol. vi. of James's "Naval History of Great Britain." pp. 420-470. London, Bentley, 1847.)
- Channing, Edward. The Burman Dispute. *Map*. S. 1885. Vol. vi. 399-402.
- Chapman, E. C. The Pacification of Upper Burma. *Map*. U. S. M. 1890. Vol. i. (N. S.) 13-27.
- Cobden, Richard. How Wars are got up in India: The Origin of the Burmese War [1852]. London, W. & F. G. Cash, 1853. pp. 58.
- Colbeck, James Alfred. Letters from Mandalay. A Series of Letters for the Most Part written from the Royal City of Mandalay during the Troublous Years of 1878-79, together with Letters written during the Last Burmese Campaign of 1885-88. Knaresborough, A. W. Lowe, 1892. pp. 113.
- Doveton, Frederick Brickdale. Reminiscences of the Burmese War in 1824-5-6. *Illustrated*. London, Allen, 1852. pp. viii + 375.
- Farrer, James Anson. The Burmese War [1885]. G. M. 1886. Vol. cclx. 62-74.
- Godwin, *Major-General* Henry. Burmah. Letters and Papers written in 1852-53. London, T. Bosworth. No date. pp. vii + 72.
- Harvey, *Captain* John. Report on the Thetta Column and Work in the Southern Chin Hills during the Season 1894-95. *Maps*. Rangoon, Govt. Press, 1895. pp. 16 + 8 + 6 + 6.
- Havelock, Henry. Memoir of the Three Campaigns of Major-General Sir Archibald Campbell's Army in Ava. Serampore, 1828. pp. x + 369 + xiii + iv.
- Keene, *Major* A. The Third Burmese War, 1885-87. *Map*. J. U. S. I. I. 1899. Vol. xxviii. 34-55.
- Laurie, William Ferguson Beatson. The Second Burmese War. A Narrative of the Operations at Rangoon in 1852. *Maps, Illustrated*. London, Smith, Elder, 1853. pp. xii + 280.
- Pegu, being a Narrative of Events during the Second Burmese War, from August 1852 to its Conclusion in June 1853. With a Succinct Continuation down to February 1854. *Illustrated*. London, Smith, Elder, 1854. pp. xi + 535.

- Our Burmese Wars and Relations with Burma. Being an Abstract of Military and Political Operations, 1824-5-6, with Various Local, Statistical, and Commercial Information, and a Summary of Events from 1826 to 1879, including a Sketch of King Theebaw's Progress. London, W. H. Allen, 2d ed., 1885. pp. 487.
- Marshall, *Lieutenant John*. Narrative of the Naval Operations in Ava during the Burmese War in the Years 1824, 1825, and 1826. London, Longman, 1830. pp. viii + 126 + xix.
- Maw, H. Lister. Memoir of the Early Operations of the Burmese War [1824]. London, Smith, Elder, 1832. pp. 106.
- Reid, *Surgeon Lieutenant-Colonel A. S.* Chin-Lushai Land, including a Description of the Various Expeditions in the Chin-Lushai Hills, and the Final Annexation of the Country. *Maps, Illustrated*. Calcutta, Thacker, Spink, 1893.
- Robertson, Thomas Campbell. Political Incidents of the First Burmese War. London, Bentley, 1853. pp. 252.
- Snodgrass, *Major John James*. Narrative of the Burmese War, detailing the Operations of Major-General Sir Archibald Campbell's Army, from . . . May 1824 to . . . February 1826. *Maps, Illustrated*. London, Murray, 1827. pp. xii + 319.
- Temple, *Lieutenant-Colonel R. C.* An Unpublished Document relating to the First Burmese War [1824]. I. A. 1897. Vol. xxvi. 40-47.
- Turner, *Lieutenant C. H.* Report on the Kairuma, Naring, and Daidin Columns, Chin Hills, 1895-96. *Maps, Illustrated*. Rangoon, Govt. Press, 1896. pp. 42.
- Turner, *Lieutenant M. N.* Report on the Sana Kachin Expedition, 1895-96. *Maps, Illustrated*. Rangoon, Govt. Press, 1896. pp. 49.
- White, *Captain William*. A Political History of the Extraordinary Events which led to the Burmese War [1824]. *Map*. London, W. Sams, 1827. pp. 169.
- Wilson, Horace Hayman. Documents Illustrative of the Burmese War, with an Introductory Sketch of the Events of the War and an Appendix. *Maps*. Calcutta, Govt. Press, 1827. pp. 248 + lxxxiii.
- Narrative of the Burmese War, in 1824-26. *Map*. London, Allen, 1852. pp. viii + 290.

THE PEOPLE OF BURMA: THEIR LIFE, MANNERS, CUSTOMS, ETC.

- Bastian, *Dr. Adolph*. Ueber die Volksstämme Birma's. Z. A. E. B. 1863. Vol. xv. (N. F.) 212-224.
- Blume, F. Ueber die Tracht der Birmanen. M. G. E. B. 1846. Vol. iii. (Series II.) 196-200.
- Burney, *Lieutenant-Colonel H.* On the Population of the Burman Empire. J. R. S. S. 1842. Vol. iv. 335-347.
- Cochrane, Henry Park. Among the Burmans: A Record of Fifteen Years and its Fruitage. New York, Revell, 1904. pp. 281.

- Cuming, E. D. With the Jungle Folk. A Sketch of Burmese Village Life. Illustrated by a Burmese artist. London, Osgood, McIlvane, 1897. pp. 400.
- In the Shadow of the Pagoda. Sketches of Burmese Life and Character. London, Allen, 1893. pp. 362.
- "Fielding, H." (H. Fielding Hall). Burmese Women. B. 1895. Vol. clvii. 776-788.
- The Soul of a People. London, Macmillan, 1898. pp. 352.
- Forbes, Captain C. J. F. S. British Burma and its People: Being Sketches of Native Manners, Customs, and Religion. London, Murray, 1878. pp. ix + 364.
- Greville, Lady Violet. Women and Worship in Burmah. N. C. 1892. Vol. xxxi. 1001-1007.
- Gyi, J. A. M. At the Play in Burma. B. 1902. Vol. clxxi. 562-571.
- Le Maistre, G. H. The Gradual Extinction of the Burmese Race. I. A. Q. R. 1893. Vol. vi. (N. S.) 321-328.
- MacMahon, Major-General Alexander Ruxton. Effects of Civilisation on the Burmese. I. A. Q. R. 1888. Vol. vi. 270-298.
- Woman's Rights in Burma. G. M. 1887. Vol. cclxii. 475-482.
- Milne, Louise Jordan. Little Folk of Many Lands. Illustrated. [Chap. iii. "Brown Burmese Babies."] London, Murray, 1899.
- Moore, Henry Charles. Burmese Traits. F. R. 1892. Vol. lviii. 607-620.
- Scott, Sir James George (Shway Yoe). The Burman: His Life and Notions. London, Macmillan, 1896. pp. 603.
- The Burmese. C. 1880. Vol. xlii. 582-589.
- The Hill Tribes of Burma. C. 1883. Vol. xlvii. 202-212.
- The Wild Wa—a Head-hunting Race. I. A. Q. R. 1896. Vol. i. (3d Series) 138-152.
- Shakespeare, Captain J. The Lushais and the Land they live in. J. S. A. 1895. Vol. xliii. 167-188.
- Taw Sein Ko. The Origin of the Burmese Race. Bm. 1904. Vol. i. No. iii. 449-461.
- Trant, Lieutenant T. A. Notice of the Khyén Tribe inhabiting the Yúma Mountains between Ava and Aracan. A. R. 1828. Vol. xvi. 261-269.
- "Tsaya." Myam-ma, the Home of the Burman. Calcutta, Thacker, Spink, 1886. pp. 90.

MISSIONS.

- Anonymous. Wayland's Life of Judson; Christianity in Burmah. (Review of Francis Wayland's "A Memoir of the Life and Labours of the Rev. Adoniram Judson, D.D.," and W. F. B. Laurie's "The Second Burmese War.") P. R. 1854. Vol. x. 119-156.
- Wayland's Life of Dr. Judson. (Review of Francis Wayland's "A Memoir of the Life and Labours of the Rev. Adoniram Judson, D.D.") N. A. R. 1854. Vol. xviii. 21-66.
- Judson's Mission to the Burman Empire. (Review of Ann H. Judson's

- "An Account of the American Baptist Mission to the Burman Empire.") L. M. 1827. Vol. viii. (N. S.) 285-313.
- American Missions in Burmah. (Review of Mrs. Wylie's "The Gospel in Burmah.") C. O. 1859. Vol. lix. 473-486.
- An Outline of the History of the Catholic Burmese Mission from the Year 1720 to 1887. Rangoon, Hanthawaddy Press, 1887. pp. 146.
- Baillie, Rev. John. Rivers in the Desert; or, Mission Scenes in Burmah. *Illustrated*. London, Seeley, Jackson & Halliday. 1858. pp. xvi + 391.
- Gallo, L. Storia del Cristianesimo nell' Impero Barmano, preceduta dalle Notizie del Paese. 3 vols. (Forming vols. 18, 19, and 20 of the "Collezione di Vite dei più distinti Religiosi della Congregazione dei Chierici RR. di S. Paoli detti Bamabiti.") Milan, 1862.
- Griffini, D. M. Della Vita di Monsignor Gio. Maria Percoto, . . . Missionario ne' Regni di Ava e di Pegu. Udine, 1781.
- Judson, Ann H. An Account of the American Baptist Mission to the Burmese Empire, in a Series of Letters addressed to a Gentleman in England. *Map*. London, Joseph Butterworth, 1827. pp. viii + 316.
- Knowles, James D. Memoir of Mrs. Ann H. Judson, Wife of the Rev. Adoniram Judson, Missionary to Burmah, including a History of the American Baptist Mission in the Burman Empire. London, William Tegg, 1868. pp. xii + 382.
- Mason, Mrs. Civilising Mountain Men; or, Sketches of Mission Work among the Karens. London, Nisbet, 1862. pp. x + 384.
- Parker, Edward Harper. Personal Reminiscences touching Christian Missionaries in China, Corea, Burma, etc., by a non-Catholic. D. R. 1897. Vol. cxx. 351-371.
- Southey, Robert. American Missions to the Burmans. (Review of Ann H. Judson's "An Account of the American Baptist Mission to the Burmese Empire.") Q. R. 1825. Vol. xxxiii. 37-63.
- Titcomb, J. H. British Burma and its Mission Work. London, W. W. Gardner. 1880.
- Wayland, Dr. Francis. Memoir of the Life and Labours of the Rev. Dr. Adoniram Judson. *Map*. London, Nisbet, 1853. 2 vols. pp. viii + 440 and iv + 419.
- Wylie, Mrs. Macleod. The Gospel in Burma. London, Dalton, 1859. pp. 519.

FRONTIER AFFAIRS.

- Anderson, Dr. John. A Report on the Expedition to Western Yunan via Bhamo. Calcutta, Govt. Press, 1871. pp. 458.
- Bagge, A. H. Report on the Settlement of the Siam and Tenasserim Boundary. [From the India Records, No. 50.] Calcutta, 1866.
- MacMahon, General Alexander Ruxton. The Anglo-Chinese Convention and the Burmese Frontier. I. A. Q. R. 1895. Vol. ix. (N. S.) 349-362.
- The Mekong-Menam Arrangement. I. A. Q. R. 1896. Vol. i. (3d Series) 232-240.

- Parker, Edward Harper. *The Burmo-Chinese Frontier and the Kakhyen Tribes.* F. R. 1897. Vol. lxviii. 86-104.
- Pemberton, Captain R. Boileau. *Report on the Eastern Frontier of British India; with an Appendix; and a Supplement by Dr. Bayfield on British Political Relations with Ava. Maps.* Printed by order of the Supreme Government of India. Calcutta, Baptist Mission Press, 1835. pp. 261 + [23] + 73.
- Schlagintweit, Dr. Emil. *Englands Grenzen in Birma.* P. M. 1903. Vol. xlix. 267-268.
- Selection of Papers regarding the Hill Tracts between Assam and Burmah and on the Upper Brahmaputra. [Ten papers by various authors.] Calcutta, Bengal Secretariat Press, 1873. pp. 335.
- Sladen, Major Sir E. B. *Exploration from Burma via the Irrawaddy and Bhamo to South-western China. Map.* J. R. G. S. 1871. Vol. xli. 257-281.
- Wingate, Captain A. M. S. *Recent Journey from Shanghai to Bhamo through Hunan. Map.* G. J. 1899. Vol. xiv. 639-646.

KARENNI AND THE KAREN PEOPLE.

- Bastian, Dr. Adolf. *Die Karen im Yunzalen-district.* Z. G. E. B. 1866. Vol. i. 128-132.
- Bringaud, J. B. *Un chapitre de l'ethnographie des Birmans Karins.* M. C. 1896. Vol. xxviii. 510, 521, 537, 551.
- Cross, E. B. *On the Karens.* J. A. O. S. 1854. Vol. iv. 289-316.
- Dürr, Ludwig von. *Die Karenen. Illustrated.* D. R. G. 1897. Vol. xx. 116-122.
- Gumprecht, Dr. T. E. *Das Volk der Kharians in Hinterindien nach den Mittheilungen der französischen Missionare Plaisant und Lacrampe.* M. V. G. E. B. 1851. Vol. viii. (N. F.) 51-62.
- Kenney, H. *The Karens of Burma.* M. F. 1903. Vol. xlviii. 197-203.
- Low, Lieutenant-Colonel James. *The Karean Tribes or Aborigines of Martaban and Tavai.* J. I. A. 1850. Vol. iv. 413-423.
- MacMahon, Major-General Alexander Ruxton. *Karenni and the Red Karens.* I. A. Q. R. 1889. Vol. viii. 144-167.
- The Karens of the Golden Chersonese. Map, Illustrated.* London, Harrison, 1876. pp. 423.
- Macgowan, D. J. *Notice of the Karens.* J. I. A. 1851. Vol. v. 345-353.
- Mason, Mrs. *Civilising Mountain Men; or, Sketches of Mission Work among the Karens.* London, Nisbet, 1862. pp. x + 384.
- O'Riley, Edward. *Notices on Karen Nee, the Country of the "Kaya" or Red Karens, 1857.* [From the Indian Records, No. 24.] Calcutta, 1858.
- Smeaton, Donald Mackenzie. *The Loyal Karens of Burma.* London, Kegan Paul, 1887. pp. 264.
- Stoll, Captain W. G. *Notes on the Yoon-tha-lin Karens: Their History, Manners, and Customs.* M. J. L. S. 1861. Vol. vi. (N. S.) 52-67.

THE KACHIN HILLS AND THE KACHIN PEOPLE.

- Steven, F. A. *The Kachins of the Chinese Borderland.* C. M. 1898. Vol. vi. 28, 29, 35, 36, 50, 51, 63, 64.
- Taw Sein Ko. *The Chin and the Kachin Tribes on the Borderland of Burma.* I. A. Q. R. 1893. Vol. v. (N. S.) 281-292.
- Turner, Lieutenant M. N. *Report on the Sana Kachin Expedition, 1895-96. Maps, Illustrated.* Rangoon, Govt. Press, 1896. pp. 49.
- Walker, General J. T. *Expeditions among the Kachin Tribes on the North-east Frontier of Upper Burma. (Compiled from the Reports of Lieutenant Elliott, Assistant Commissioner.)* J. R. G. S. 1892. Vol. xiv. (N. S.) 161-173.

THE SHAN STATES AND THE SHAN PEOPLE.

- Bryce, J. Annan. *Siam and the Shan States.* J. M. G. S. 1885. Vol. i. 145-161.
- Colquhoun, Archibald R. *Amongst the Shans. With upwards of fifty whole-page illustrations and a Historical Sketch of the Shans, by Holt S. Hallett, preceded by an Introduction on the Cradle of the Shan Race, by Terrien de Lacouperie. Map, Illustrated.* London, Simpkin Marshall, 1885. pp. 392.
- Ehlers, Otto E. *Im Sattel durch Indo-China.* Berlin, Allgemeiner Verein für Deutsche Litteratur. 1894. Vol. i. pp. 332.
- Elias, Ney. *Introductory Sketch of the History of the Shans in Upper Burma and Western Yunnan.* Calcutta, Foreign Department Press, 1876. pp. 63.
- Hallett, Holt S. *A Thousand Miles on an Elephant in the Shan States. Maps, Illustrated.* Edinburgh, Blackwood, 1890. pp. xxxvi + 484.
- Hillier, W. R. *Notes on the Manners, Customs, Religion, and Superstitions of the Tribes inhabiting the Shan States.* I. A. 1892. Vol. xxi. 116-121.
- MacMahon, Major-General Alexander Ruxton. *The Ancient Shan Kingdom of Pong.* I. A. Q. R. 1890. Vol. x. 18-35.
- Schlagintweit, Emil. *Die Schan-Staaten, ein neues Handelsgebiet in Hinterindien.* O. M. O. 1889. Vol. xv. 55-57.
- Scott, Sir James George (Shway Yoe). *The Prospects of the Shan States.* J. S. A. 1905. Vol. liii. 623-639.
- The British Shan States.* I. A. Q. R. 1889. Vol. viii. 1-47.
- The Gazetteer of Upper Burma and the Shan States.* Rangoon, Govt. Press. 1900.
- Streeter, G. Skelton. *The Northern Shan States.* T. R. G. S. A. (V. B.) 1888-89. Vol. vi. Part II. 41-48.
- Sutherland, William. *Along a Shan Road: Southern Shan States.* S. G. M. 1898. Vol. xiv. 188-198.
- Wallace, Captain A. *The Occupation of the Southern Shan Country at the Commencement of 1887.* J. U. S. I. I. Vol. xviii. No. 75. Simla.

- Woodthorpe, *Colonel R. G.* The Shan Hills: Their People and Products. J. S. A. 1896. Vol. xlv. 197-210.
 Some Account of the Shans and Hill Tribes of the States on the Mekong. J. A. I. 1897. Vol. xxvi. 13-28.
 The Country of the Shans. *Maps, Illustrated.* G. J. 1896. Vol. vii. 577-602.
 Yate, Arthur Carnac. The Shan States. I. A. Q. R. 1888. Vol. vi. 309-326.
 Younghusband, *Lieutenant G. J.* Eighteen Hundred Miles on a Burmese Tat through Burma, Siam, and the Eastern Shan States. *Maps, Illustrated.* London, Allen, 1888. pp. 162.

ARAKAN AND THE ARAKANESE.

- Anonymous. Les Khyangs d'Arakan. B. S. G. 1828. Vol. x. 71-76.
 Empire Birman. Arracan. B. S. G. 1826. Vol. v. 529-531.
 The Arracan Expedition, 1825. P. R. A. I. 1900. Vol. xxvii. 65-74.
 Hay, John Ogilvy ("Old Arakan"). Arakan, Past, Present, Future: A Résumé of Two Campaigns for its Development. Edinburgh, Blackwood, 1892. pp. viii + 216.
 Hughes, *Major W. Gwynne.* The Hill Tracts of Arakan. *Map.* Rangoon, 1881. pp. 55.
 Paton, C. Historical and Statistical Sketch of Arakan. A. R. 1828. Vol. xvi. 353-381.
 Rigby, *Captain G. C.* History of the Operations in Northern Arakan and the Yawdwin Chin Hills, 1896-97, with a Description of the Country and its Resources, Notes on the Tribes, and Diary. *Maps, Illustrated.* Rangoon, Govt. Press, 1897. pp. 169.
 Turner, W. Brief Account of the Trade of Arracan, 1761. D. O. R. 1793. Vol. i. 227-228.

THE CHIN HILLS AND THE CHIN PEOPLE.

- Anonymous. Routes in the Chin-Lushai Tract. Compiled in the Intelligence Branch of the Quartermaster-General's Department in India. Simla, Govt. Press, 1893. pp. 163.
 Military Report on the Chin-Lushai Country. Simla, Govt. Press, 1893. pp. 112 + xlii.
 Carey, Bertram S., and Tuck, H. N. The Chin Hills: A History of the People, our Dealings with them, their Customs and Manners, and a Gazetteer of their Country. *Illustrated.* Rangoon, Govt. Press, 1896. Vol. i. pp. iv + 236.
 Harvey, *Captain John.* Report on the Thetta Column and Work in the Southern Chin Hills during the Season 1894-95. *Maps.* Rangoon, Govt. Press, 1895. pp. 16 + 8 + 6 + 6.
 Rainey, *Lieutenant R. M.* Notes on the Chinboks, Chinbons, and Yindus of the Chin Frontier of Burma. *Illustrated.* I. A. 1892. Vol. xxi. 215-224.

- Reid, *Surgeon-Lieutenant-Colonel* A. S. Chin-Lushai Land, including a Description of the Various Expeditions in the Chin-Lushai Hills, and the Final Annexation of the Country. *Maps, Illustrated*. Calcutta, Thacker, Spink, 1893. pp. 235.
- Rigby, *Captain* G. C. History of Operations in Northern Arakan and the Yawdwin Chin Hills, 1896-97, with a Description of the Country and its Resources, Notes on the Tribes, and Diary. *Maps, Illustrated*. Rangoon, Govt. Press, 1897. pp. 169.
- Ross, D. A Note on the Tashon and Baungshe Chins, with Remarks on their Manners, Customs, and Agriculture. I. A. 1892. Vol. xxi. 190-193.
- Rundall, *Major* F. M. The Siyin Chins. *Map*. R. G. S. S. P. 1893. Vol. iii.
- Taw Sein Ko. The Chin and the Kachin Tribes on the Borderland of Burma. I. A. Q. R. 1893. Vol. v. (N. S.) 281-292.
- Turner, *Lieutenant* C. H. Report on the Kairuma, Naring, and Daidin Columns, Chin Hills, 1895-96. *Maps, Illustrated*. Rangoon, Govt. Press, 1896. pp. 42.
- Walker, E. O. The Chin-Lushai Country. G. M. 1894. Vol. cclxxvi. 227-242.

OFFICIAL PUBLICATIONS.

The following is a list of the principal publications issued by the Government of Burma. An official catalogue of books for sale at the Government Book Depot, Burma, is issued half-yearly; and the following list is compiled from the catalogue issued in January, 1906.

Codes.

- The Burma Code.
- The Criminal Procedure Code.
- The Civil Procedure Code.
- The Indian Penal Code.
- The Burma Famine Code.

Manuals and Hand-books.

- The Upper Burma Village Manual.
- The Upper Burma Village Headman's Manual.
- The Burma Stamp Manual.
- The Burma Municipal Act Manual.
- The Burma Ferries Manual.
- The Burma Sea Customs Manual.
- Hand-book of Agriculture for Burma.
- The Burma Rules Manual. 2 vols.
- The Burma Commercial Marine Rules Manual.
- The Land Records Examination Manual for Burma.

Manuals and Hand-books (Continued).

- The Burma Boundaries Manual.
- The Burma Medical Manual.
- The Akyab Port Manual.
- The Bassein Port Manual.
- The Burma Arms Manual.
- A Practical Hand-book of the Kachin or Chingpaw Language.
- A Practical Hand-book of the Language of the Lais as spoken by the Hakas and Other Allied Tribes of the Chin Hills (commonly called the Baungshè dialect.)
- The Burma Treasury Manual.
- The Burma Travelling Allowance Manual.
- The Burma Accounts Manual.
- Manual of Rules relating to Precious Stones, Minerals, and Mineral Oils in Force in Burma on the 1st of August, 1905.
- The Upper Burma Land Revenue Manual.
- The Lower Burma Land Revenue Manual.
- The Lower Burma Forest Manual.
- The Upper Burma Forest Manual.
- The Burma Forest Manual.
- The Burma Factories Manual.
- The Upper Burma Registration of Deeds Manual.
- The Moulmein Port Manual.
- The Burma Plague Manual.
- The Burma Explosives Manual.
- The Burma Income Tax Manual.
- The Burma Inspection Manual.
- The Burma Examination Manual.
- The Upper Burma Courts Manual.
- The Burma Military Police Manual.
- Manual of the Maru Language.
- An Elementary Hand-book of the Red Karen Language.
- Manual of Appointments and Allowances.
- The Land Acquisition Manual.
- The Kachin Hills Manual.
- The Burma Police Manual. 2 vols.
- The Burma Subdivisional and Township Office Manual.
- Lower Burma Registration of Deeds Manual.
- The Cattle Trespass Act Manual.
- The Burma Excise Manual.
- The Burma Opium Manual.
- The Burma District Office Manual.
- The Lower Burma Courts Manual.

Circulars.

- Burma Secretariat Circulars.
- Judicial Commissioner's Circulars, Upper Burma.

Circulars (Continued).

Financial Commissioner's Circulars.

Circulars issued by the Local Administration in the Appointment, General, and other Departments.

Circulars of the Director of the Department of Land Records and Agriculture.

Imperial Acts, Local Acts, Regulations, Rules, and Bye-laws.

All Acts and Regulations and all the Rules and Bye-laws made under them are issued from time to time as they come into force, and may be purchased at a nominal price from the Curator of the Government Book Depot, Rangoon.

Miscellaneous Publications.

The Chin Hills: A History of the People, our Dealings with them, their Customs and Manners, and a Gazetteer of their Country, by B. S. Carey and H. N. Tuck. 2 vols.

The Upper Burma Gazetteer. 5 vols.

The British Burma Gazetteer. 2 vols.

Census Reports. See p. 983, *ante*.

Printed Judgments of the Judicial Commissioner, Upper Burma. Annual.

Lower Burma Printed Judgments. Annual.

Annual Reports.

Report on the Administration of Burma.

Report on Civil Justice.

Report on Criminal Justice.

Report on the Administration of the Excise Department.

Report on Forest Administration.

Report on the Land Revenue Administration.

Report on the Administration of Salt Revenue.

Report on the Administration of Stamp Revenue.

Report on the Working of the Income Tax Act.

Resolution on the Reports on the Working of the Factories Act in Lower Burma.

Report of the Insein Reformatory.

Report on the Local Funds of Burma.

Report on the Light-houses and Light-vessels.

Note on the Rangoon Lunatic Asylum.

Report on the Land Records Administration.

Rainfall Report.

Report on the Crop Measurements.

Report on Archaeological Work.

Report of the Chemical Examiner.

Report on the Revision Settlement Operations.

Annual Reports (Continued).

- Report on Public Instruction.
- Report of the Educational Syndicate.
- Report on the Administration of Police.
- Season and Crop Report.
- Statistics regarding Sales, Transfers, Rents, and Prices of Produce.
- Report on the Rangoon Town Police.
- Report on the Police Supply and Clothing Department.
- Report on the Prison Administration.
- Report on the Working of the Registration Department.
- Report on Government Steamers, Vessels, and Launches.
- Report on the Administration of the Chin Hills.
- Report on the Administration of the Shan and Karenni States.
- Report on the Administration of the North-eastern Frontier.
- Resolution on the Reports on Village Administration.
- Resolution reviewing the Reports on the Working of Municipalities.
- Notes and Statistics on the Hospitals and Dispensaries.
- Report on the Sanitary Administration.
- Notes and Statistics on Vaccination.
- Report of the Civil Veterinary Department.
- Statement of Sea-borne Trade and Navigation.
- Note on the Trans-frontier Trade of Burma.
- Report on the Administration of the Kheddah Department.
- History of Services of Gazetted and Other Officers in Burma.
- The Quarterly Civil List.

NOTE. All the official publications enumerated above are issued as separate documents, and, so far as they are in print at any time, may be purchased from the Curator of the Government Book Depot, Rangoon, Burma.

APPENDIX U.

GLOSSARY OF INDIAN AND BUR-
MESE WORDS USED IN
THESE VOLUMES

APPENDIX U.

GLOSSARY OF INDIAN AND BURMESE WORDS USED IN THESE VOLUMES

- AKUNWUN. The officer in charge of the revenue office of a Deputy Commissioner.
- ANNA. The anna is equal to $\frac{1}{16}$ of a rupee in the Anglo-Indian currency. It is therefore equal to about one penny English currency or two cents United States currency.
- BAN. A flat, shallow basket.
- BHANG. An intoxicating drug made from hemp.
- BHUNDARI. A storekeeper.
- BO. The leader of a military band, a military officer.
- CHARAS. A hemp product which is the base of all the intoxicating preparations of hemp, such as *bhang* and *ganja*.
- CHAUDHARI. A village headman. The headman of a profession or trade in towns.
- CRORE. One hundred lakhs, that is to say 10,000,000.
- DA. A sword.
- DACOIT. A robber belonging to an armed gang.
- DACOITY. Gang robbery.
- DAFTARI. An inferior office servant.
- DAROGAH. A superintendent or manager.
- DRILL HAVILDAR. A native non-commissioned officer corresponding in rank with a drill sergeant.
- DUFFADAR. A petty officer of police. In regiments of irregular cavalry, a non-commissioned officer corresponding in rank with a corporal.
- DURBAR. A court, an audience, a levee. The word is almost always used by English writers in the above sense; but it has another meaning,—namely, the Executive Government of a Native State.
- DUWA. A chief of a Kachin tribe.
- ENG, or IN. A tree well represented in many of the Burmese forests. It is the *Dipterocarpus tuberculatus*.
- GANJA. An intoxicating drug prepared from Indian hemp.
- GAUNG. A village official subordinate to a headman.
- GODOWN. A warehouse; a storeroom.
- GOMASHTAH. A native agent or factor.

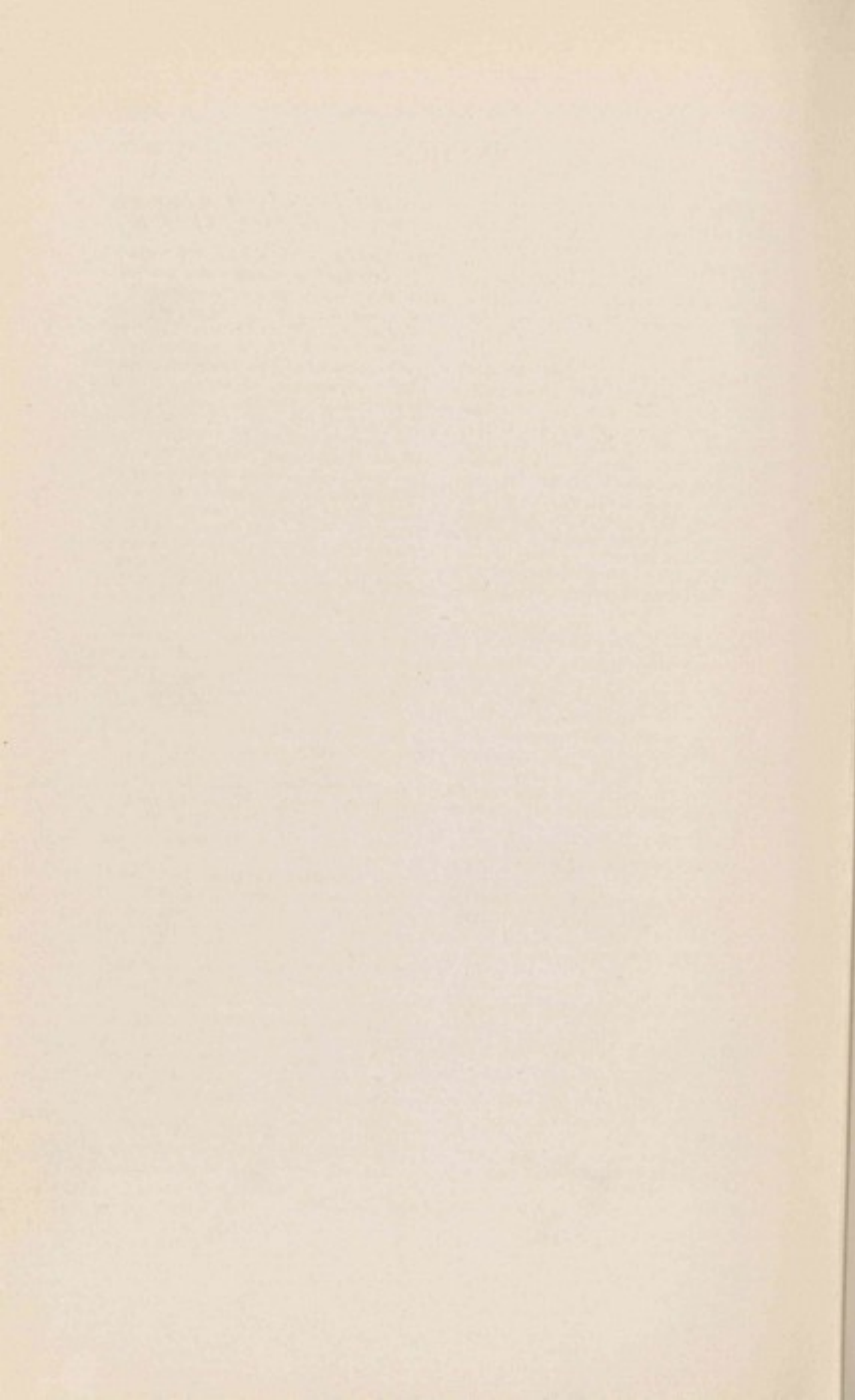
- GRAM. A term current for varieties of pulse, especially for the chick-pea, *Acer arietinum*.
- GURKA (Goorka). The name of the race now dominant in Nepal. They are excellent soldiers; and a number of regiments of the Indian army are recruited from the tribe.
- HAVILDAR. A native non-commissioned officer corresponding in rank with a sergeant.
- JHOOM. The Indian name for the hill or dry cultivation called *taungya* by the Burmese.
- JOWAR. A species of millet.
- KAING. Elephant grass.
- KAZIN. Small artificial ridges forming partitions between fields.
- KOTWAL. A superintendent of markets or bazaars.
- KWIN. A piece of land selected as a survey unit, on account of its natural boundaries or because it coincides with some administrative area.
- KYAUNG. A Buddhist Monastery in Burma.
- KYEDANGYI. A headman for the purposes of the District Cess and Rural Police Act in Burma.
- LAKH, LACK. One hundred thousand.
- LANCE NAIK. A native non-commissioned officer corresponding in rank with a lance corporal.
- LASCAR. A native sailor.
- LÉZA. A tree represented in the Burmese forests. It is the *Lagerstroemia tomentosa*.
- LUGYI. A village elder.
- MAHRATTA. An important Hindu race. According to the Indian Census of 1901 there were in India 18,237,899 persons speaking the Marathi language.
- MAISTRIE. A foreman or master worker.
- MAUND. An Indian measure of weight, which in Burma is taken to equal $82\frac{1}{2}$ pounds avoirdupois.
- MAYIN. Dry-weather paddy.
- MITHUN (Mythun). A hybrid between the buffalo and the cow.
- MUCHIE. A leather worker, such as a saddler or shoemaker.
- MUG. A corruption of Magh or Mugh, the derivation of which is uncertain. A name commonly applied to the natives of Arakan, particularly those bordering on Bengal, or residing near the sea; the people of Chittagong.
- MUNSIFF. A native civil judge of the lowest rank.
- MYINGAUNG. A cavalry leader under the former native government in Burma.
- MYOÔK. A Government official known as Township Officer.

- MYOZA.** Ruler of a Shan sub-State, or of one of the smaller Shan States.
- MYRABOLAM.** The dried fruits and kernels of several species, but chiefly of *Terminalia Bellerica* and *Terminalia Chebula*. The present use of Myrabolams is chiefly for tanning; but they are used to some extent in native Indian pharmacy.
- NAIK.** A native non-commissioned officer corresponding in rank with a corporal.
- NAT.** A spirit.
- NGAPI.** The Burmese name for the characteristic condiment of the Indo-Chinese and Malayan races, composed of prawns and other small fish allowed to ferment in a heap and then mashed up with salt.
- NGWEKUNHMU.** A Shan official.
- PADDY.** Rice in the husk, whether growing or cut, before threshing or before the grain is separated.
- PAKONDAN.** A pedlar.
- PATAMABYAN.** Literally, to rehearse at the Patama examination in the Buddhist scriptures; one who has passed this examination. The word Patama means first.
- PEON.** An orderly or messenger.
- PICE.** A small copper coin of the Anglo-Indian currency. There are 4 pice in an anna, and 64 in a rupee. The pice is therefore equal to about one farthing, or half a cent United States currency.
- PIE.** The smallest copper coin of the Anglo-Indian currency. There are 12 pies in an anna, and 192 pies in a rupee. The pie is therefore equal to about $\frac{1}{3}$ of a farthing, or $\frac{1}{6}$ of a cent United States currency.
- PÔNGYI.** A Buddhist monk.
- POTDAR.** A money-changer, a weigher and assayer of coins.
- PURDAH.** A curtain.
- PYINGADO (Pyinkado).** A tree represented in the Burmese forests. It is an ironwood, the *Xylia dolabriformis*.
- PYINMA.** A tree represented in the forests of Burma. It is the *Lagerstroemia Reginae*.
- RUPEE.** The standard coin of the Anglo-Indian currency. Its value is fixed at one shilling and fourpence English currency, equal to about 32 cents United States currency.
- SALUTRI.** A native farrier or horse-doctor.
- SANAD (Sunud).** A grant, a diploma, a charter, a document conveying rights, titles, privileges, houses, offices, etc.
- SARKAR.** A native accountant or writer.
- SAWBWA.** The ruler of a Shan State.

- SEEINGAUNG. A headman in charge of ten houses.
- SEPOY (Seapoy). From the Persian word "sipahi," soldiery, and army. In Anglo-Indian usage the word is used for a native soldier, disciplined and dressed in the European style.
- SERANG. A native boatswain.
- SHA. The Burmese name for cutch, *Acacia catechu*.
- SHIKARI. A hunter.
- SHROFF. A money-changer or tester.
- SIKH. The name of the people in the Punjab, as the disciples of Nanak Shah. The literal meaning of the word is scholar or disciple. According to the Indian Census of 1901 there were in the whole of India 2,195,339 Sikhs.
- SUBADAR. The chief native officer of a company of a native regiment in India.
- SUNGAR. A rude stone breastwork.
- TAIK. A circle or group of villages.
- TAUNGYA. Hill garden cultivation, shifting annually from place to place.
- TEAK. One of the most important trees of Burma. It is the *Tectona grandis*.
- TERAI. Marshy ground. The term is specially applied to the belt of marshy and jungly land which runs along the foot of the Himalayas, north of the Ganges.
- THAMADI. An official who assesses the *thathameda*.
- THATHAMEDA. A house-tax, levied in Upper Burma.
- THITKA. A tree represented in the Burmese forests. It is the *Pentace Burmanica*.
- THITKADO. A tree represented in the Burmese forests. It is the *Cedrela Toona*.
- THUGEE (Thagi). The practice of strangling and robbing.
- THWETHAUKGYI. Literally, "blood-drinker," a military officer under the former native government in Burma.
- TINDAL. An overseer or head of a gang of labourers. On board ship a boatswain.
- TOPASS. A sweeper on board ship.
- VAKIL. An attorney, an authorised representative.
- YOMA. A main range of hills.
- YWAGAUNG. The agent of a village headman in Upper Burma.
- YWATHUGYI. Headman of a village or group of villages in Upper Burma.

INDEX

NOTE.—In preparing this index, I have been guided by the following principle: a reference to every general subject will be found under the head "BURMA," and each subject which admits of subdivision will be found separately indexed under its proper head. An example will make the principle perfectly clear. If it is desired to know where the general treatment of Forest Administration is to be found, sufficient reference is given under the general head "BURMA," where, in its proper alphabetical order, occurs the entry "forest administration 623-657." If, however, it is desired to know where the treatment of some special phase of forest administration is to be found, the reference is given under the general head "FOREST ADMINISTRATION," where, in alphabetical order, each element of forest administration is indexed separately, thus:—FOREST ADMINISTRATION 623-657 abstract of the Burma Forest Act 628-636 appointments to the forest service, regulations for 637-648 area of reserved forest 918 area of unclassed State forest 918 commercial exploitation 653-655 expenditure on forests 655-657 920 exploitation, general system of 650-653 finances of the forest department 655-657 915-920—and so on.



INDEX

- ADMINISTRATION, GENERAL 111-126 administration of a district 123-126 administrative divisions 111-116 administrative manuals and codes 120 121 administrative scheme of a division 116 assistant commissioners, their duties 122 chief secretary 117 449 450 commissioners, their duties 122 departments, imperial 118 119 departments, provincial 119 120 deputy commissioners, their duties 122-123 district, administration of a 123-126 district treasury officer 124 125 executive officers 122 extra assistant commissioners, their duties 122 financial commissioner 118 452-454 myoóks, their duties 122 revenue secretary 117 450 451 secretariat 117 118 449-454 secretary 117 451 452 seeingsangs 122 system of control 117-121 village headmen 122 713-733 work of secretariat 117 449-454.
- AGRICULTURAL LOANS 611-613 910 911
- AGRICULTURE 19 76
- ALAUNG PAYÁ 22 23 36 66
- ALLEN, MAJOR GRANT 62
- ALOMPRA 22 23 36 66
- ANIMISM 74 75
- ANÓRAT'A 67
- ARAKAN DIVISION 111 112
- ARAKANESSE, THE, account of 65 66 infirmities amongst 385 number of 3 58
- ASHBURTON, LORD 132 401
- ASSISTANT COMMISSIONERS, their duties 122
- AITCHISON, SIR CHARLES 135
- AUDIT OF PUBLIC ACCOUNTS 539-548
- AUKLAND, LORD 29
- BAGYIDAW 23 29
- BAINES, MR. (afterwards Sir) JERVOIS 80 87
- BARBOUR, SIR DAVID 522 531 545
- BAYINHAUNG 22
- BENSON, COLONEL 29
- BERNARD, SIR CHARLES 675
- BIBLIOGRAPHY 973-1001
- BIGANDET, BISHOP 74 75
- BLINDNESS 87 88 384 385
- BRANDIS, SIR DIETRICH 626
- BRITISH METHODS of Government compared with native methods 101-110
- BUDDHISM, in its relation to the State 71-74 number of adherents 271 358
- BURMA, acquisition by the British 21-57 administrative divisions 111-116 agricultural loans 611-613 910 911 agriculture 19 76 Animism 74 75 area 2 audit of public accounts 539-548 bibliography 973-1001 births and deaths, statistics of 927-929 blindness 87 88 384 385 boundaries 1 Buddhism in its relation to the State 71-74 canals 670 671 census of 1901, tables from 355-385 chief commissionership created 91 Chin Hills 115 783-798 Chingpaw *see* Kachins, Chins, the 66 67 784-788 cholera 738 925 civil justice, statistics of 485-490 civil service 127-172 387-421 457-482 climate 7-10 423-432 coinage 549 550 commerce 799-830 931-972 comparison between British and native rule in 101-110 co-operative credit societies 614-622 council of the Lieutenant-Governor 99-101 435-439 courts of law 181-186 191 192 crime, statistics of 215-218 228-230 491-494 501 502 currency question 521-528 customs duties 576 936 deaf-mutism 84 86 87 384 385 deaths and births, statistics of 927-929 departments, imperial 118 119 departments, provincial 119 120 diseases, principal ones treated in the hospitals 738 925 dispensaries 734 735 education 77-84 266-340 educational statistics 309-314 513-520 employment of natives in civil service 155-161 examinations, departmental 152-154 examinations for civil service 136-144 403-421 excise revenue 575 expenditure, public 578-580 exports, coasting 818-821 944 951-955 exports, dutiable and free 576 827 936 exports, foreign 808-811 941-943 exports, government 821-823 958 exports of rice 963 exports of teak 964 exports, of treasure 823 957 exports, total value of 800 801 935 exports, trans-frontier 824-827 961 962 finance 521-580 financial administration 553-580 financial commissioner

BURMA (*Continued*)

118 452-454 financial statistics 567-573 833-839 financial system 521-552 first Burmese war 22-29 forest administration 623-657 forest policy 623-625 forestry statistics 913-920 forests 10-17 624 625 913-920 general administration described 111-126 general description of 1-20 glossary 1003 government of, described 90-110 government stores, import and export of 821-823 958 harbour administration 745-761 headmen of villages 122 713-733 hospitals 734-739 923-925 imports, coasting 811-818 944-950 imports, dutiable and free 576 827 936 imports, foreign 802-808 937-940 imports, government 821-823 958 imports, of treasure 823 956 imports, total value of 800 801 935 imports, trans-frontier 824-827 959 960 income tax 576 577 indigenous races 3 58-69 83 357 infirmities, population classified according to 84 384 385 inhabitants of 2 3 58-89 355-385 insanity 84-86 384 385 741 irrigation 669-674 jail administration 231-265 jail statistics 503-512 judicial administration 173-197 483-494 judicial statistics 483-494 justice, administration of 173-197 483-494 Kachins 3 58 68 69 83 385 Karenni 781 782 kyedangyi 714 lakes 6 7 land, mortgages and sales of 908 land occupiers, classification of 909 land revenue policy 581-595 land-revenue settlement, details of 859-897 land-revenue, statistics of 610 611 899-907 land revenue system 581-622 land, sales and mortgages of 908 land tenancies, details of 909 land tenures 595-602 law and justice 173-197 483-494 legal tender 550 551 legislative council created 93 legislative system 97-101 435-439 leprosy 88 89 384 385 741 785 925 Lieutenant-Governor 99-101 117 Lieutenant-Governorship created 93 literacy of the population 77-84 381-383 lunatic asylum 741 malarial fevers 738 925 Mandalay canal 670 671 manufactures 20 medical administration 734-742 medical statistics 921-929 mineral resources 19 20 Môn canals 671 morphia, rules for the manufacture, possession, and sale of 854 855 mortgages and sales of land

908 mountains 4 5 municipal administration 680-711 myingaungs 715 myothugyi 715 716 717 722 nat-worship 74 75 natives, their employment in civil service 155-161 natural divisions 3 4 non-indigenous races 69 70 357 occupations, classification of population according to 75 76 360-380 official correspondence, rules for 443-449 opium regulations 843-855 opium revenue 574 836 837 pacification of Upper Burma 45-57 paper currency 551 552 pensions government officials 163-169 457-482 people of 2 3 58-89 355-385 physical features 3-10 plague 740 police administration 198-230 police statistics 497-500 pōngyi 72-75 81 population 2 3 58-89 355-385 port administration 745-761 postal statistics 840 841 prison administration 231-265 prison statistics 262-265 503-512 progress between 1826 and 1865 102-110 provincial contract 561-563 provincial rates 576 public instruction 266-340 513-520 public works 658-679 public works department 118 119 537-539 541 658-662 races, indigenous 3 58-69 83 357 races, non-indigenous 69 70 357 railways 674-679 rainfall 7-9 430-432 religions 2 71-75 358 359 revenue, public 568-578 835-837 rivers 5 6 sales and mortgages of land 908 salt revenue 574 sanitary administration 742-744 schools, *see under* public instruction, second Burmese War 29-36 secretariat 117 118 449-454 Shamanism 74 75 Shan States 114 115 762-782 Shans, the 62-64 764 765 shipping 827-830 965-972 Shwebo canal 671 small-pox 738-740 925 stamp revenue 574 575 taik 714 taxation 568-577 teak 11 16 626-628 651 657 temperature 9 10 425-429 432 thathameda 607-609 730 732 733 904 third Burmese War 36-44 thugyi 714 716 thwe-thaukyis 715 trade and shipping 799-830 931-972 trans-frontier trade 824-827 959-962 treasure, import and export of 823 956 957 treaties relating to Burma 343-353 tubercular diseases 738 925 under British and under native rule 101-110 vaccination 739 740 926 vegetation 17 18 venereal diseases 738 925 village ad-

- BURMA (*Continued*)
 ministration 122 712-733 village
 headmen 122 713-733 vital statistics
 927-929 wars 22-44 weights and
 measures, Burmese and Indian 842
 women 76 81-84 ywathugyi 717
 BURMESE RACE, characteristics of
 60-62 infirmities 385 literacy of 83
 number of 3 58 origin of 59 60
 BURMESE WARS 22-44
 BURNEY, MAJOR 29
- CAMPBELL, SIR ARCHIBALD 27
 CANALS 670 671
 CANNING, LIEUTENANT (after-
 wards Captain) 25 26
 CAREY, BERTRAM S. 784
 CENSUS of 1901, tables from 355-385
 CHINGPAW *see* KACHINS
 CHIN HILLS 115 783-798 adminis-
 tration of 791-798 agriculture 788
 789 British occupation of 790 791
 Chin Hills Regulation 791-798 civil
 justice 798 criminal justice 798 de-
 scription of the country 783 784 ef-
 fects of British occupation 791 head-
 men and their powers 792 finance 798
 industries and trades 788-790 in-
 habitants 66 67 784-788 jurisdiction
 and special powers of officers in 793-
 796 justice 798 manufacture 789
 policy of Government in 791 popula-
 tion of 784 special rules as to arms,
 ammunition, opium, and forests 797
 taxation 797 798 trades and indus-
 tries 788-790 under native rule 790
 villages 786-788 water supply 787
 788
 CHINS, THE, account of 66 67 784-
 788 carrying capacity of 786 char-
 acteristics of 785 divisions of 785
 effects of British occupation on 791
 industries and trades of 788-790 in-
 sanity amongst 85 86 385 jhoomers
 786 787 leprosy amongst 89 385 785
 literacy of 83 number of 3 58 784
 physical development of 785 raiding
 tribes 787 taungya cutters 786 787
 trades and industries of 788-790 un-
 cleanliness of 786 villages of 786-788
 water supply of 787 788
 CHOLERA 788 925
 CHURCHILL, LORD RANDOLPH 41
 CIVIL DIVISIONS, account of 111-116
 administrative scheme of 116 area of
 2 population of 3 according to re-
 ligions 358 359
- CIVIL JUSTICE, statistics of 485-490
 CIVIL POLICE *see* POLICE, CIVIL
 CIVIL SERVICE 127-172 387-421
 457-482 Burma Commission 128 129
 classification of the service 128 cler-
 ical service 149-152 college at Fort
 William 130 131 competitive ex-
 aminations introduced 132 conference
 on 142 departmental examinations
 152-154 early regulation by statute
 130 East India Company and 130-133
 employment of natives 155-161 ex-
 amination, regulations for 136-143
 405-410 examination, selection from
 papers set at 410-421 examination,
 final 141 407-409 examinations 136-
 144 152-154 403-421 examina-
 tions, their severity 140 family pen-
 sion regulations 167-169 Fitzpatrick,
 Sir Dennis, his views on 155-161 gen-
 eral administrative service 128 Hai-
 leybury College 131 132 historical
 account of 129-136 Indian civil ser-
 vice 129-144 387-401 inquiry into
 system in 1876 135 inquiry into sys-
 tem in 1886 135 136 languages re-
 quired 153 154 leave rules for officials
 169-172 linguistic studies, encourage-
 ment of 154 155 Macaulay commis-
 sion on 132-135 387-401 natives,
 employment of 155-161 open com-
 petitive examination 136-140 143 144
 405-421 papers set at examination
 410-421 pensions of officials 163-169
 457-482 professional services 128
 promotion, system of 155 provincial
 civil service 144 145 public service
 commission 145 regulations for ex-
 aminations 136-142 405-410 regu-
 lations, new, for examinations in 1906
 142 143 report of Macaulay com-
 mission on 132-135 387-401 re-
 tirement of officials 164 166 salaries
 of officials 161-163 special services
 128 subjects of examination 136-144
 subordinate civil service 146-149
 technical services 128 Wellesley,
 Lord, and 130 131
 CIVIL SERVICE, INDIAN 129-144
 387-421
 CIVIL SERVICE, PROVINCIAL 144
 145
 CIVIL SERVICE, SUBORDINATE
 146-149
 CLIMATE 7-10 423-432
 COINAGE ACT, THE INDIAN 549
 550

- COLQUHOUN, ARCHIBALD R. 62
 COLVIN, SIR AUCKLAND 545
 COMMERCE 799-830
 COMMISSIONERS, their duties 122
 CO-OPERATIVE CREDIT SOCIETIES 614-622 agricultural banks and credit societies 615 audit 621 co-operative credit societies Act 614 credit societies and agricultural banks 615 difficulty of obtaining money 615 education of people to system 622 election of members 618 financial aid by Government 621 Government guidance and control 618 619 liability unlimited 617 loans by Government and native money lenders 614 loans to be made to members only 619 members, election of 618 membership open to all 617 618 objects of present legislation 616 617 people to be educated to system 622 residence, question of 618 security, character of 619 620 shares, limit on number to be held 621 simplicity and elasticity desirable 616 unlimited liability 617 special legislation necessary 615 616
 COUNCIL OF INDIA 93-95
 COUNCIL OF THE GOVERNOR-GENERAL OF INDIA 93 95-98
 COUNCIL OF THE LIEUTENANT-GOVERNOR 99-101 435-439
 COUPERIE, TERRIEN DE LA 62
 COX, CAPTAIN HIRAM 24
 CRANBOURNE, LORD (afterwards Marquess of Salisbury) 102
 CRIME, statistics of 215-218 228-230 491-494 501 502
 CRIMINAL JUSTICE, statistics of 491-494
 CROMER, LORD 532 545
 CROSS, LORD 546
 CROSTHWAITE, SIR CHARLES 712 766
 CUMING, E. D. 60
 CURRENCY QUESTION 521-528 549-552 closing of Indian mints to free coinage of gold and silver 527 currency notes in circulation, number and value of 552 difficulties caused by fall of rupee 522 523 effects of fall of exchange, on Government servants 523 on export of produce 523 524 on Indian commerce 524 525 on volume of imports and exports 525 on investment of capital 525 526 exchange value of the rupee from 1873-1899 528 final action on Indian currency 527 Fowler report 521 527 Herschell report 521 523-527 history prior to 1893 522 Indian Coinage Act 549 550 Indian Currency Committee of 1893 521 523-527 Indian Currency Committee of 1898 521 Indian Paper Currency Act 551 552
 CURZON, LORD 562
 CUSHING, DR. J. N. 62 764
 CUSTOMS DUTIES 576 936
 DACOITS 48 49
 DALHOUSIE, LORD 33
 DALY, LIEUTENANT H. 765
 DEAF-MUTISM 84 86 87 384 385
 DEPARTMENTS OF THE GOVERNMENT 117-120
 DEPUTY COMMISSIONERS, their duties 122 123
 DESCRIPTION, GENERAL, of Burma 1-20
 DICKENS, LIEUTENANT-GENERAL 554 555
 DISEASES, anaemia 925 blindness 87 88 384 385 carcinoma 925 cholera 738 925 deaf-mutism 84 86 87 384 385 debility 925 dysentery 738 925 general diseases 738 925 leprosy 88 89 384 385 741 785 925 local diseases 738 925 malarial fevers 738 925 plague 740 principal diseases treated in the hospitals 738 925 rheumatic ailments 738 925 sarcoma 925 scurvy 925 small-pox 738-740 925 statistics of 738 925 tubercular diseases 738 925 venereal diseases 738 925 worms 738 925
 DISTRICT, administration of a 123-126
 DIVISIONS *see* CIVIL DIVISIONS
 DUFFERIN, LORD 44
 DUTT, R. C. 582
 DYSENTERY 738 925
 EALES, H. L. 78 79 81
 EDUCATION *see* PUBLIC INSTRUCTION
 ERSKINE, GENERAL 24
 EXAMINATIONS, abuse of 272 273 civil service 136-144 403-421 departmental 152-154 forest service 637-648 in languages 153 154 in law 153 154 in revenue procedure 153 154 in treasury work 153 154 teachers' 307-309
 EXCHANGE *see* CURRENCY QUESTION

EXCISE REVENUE 575

EXPENDITURE, PUBLIC 578-580

838 839 *see also under each department, as Public Works, Police, etc.*

EXPORTS *see* TRADE AND SHIPPING

EXTRA ASSISTANT COMMISSIONERS, their duties 122

FERRARS, BERTHA 60 Ferrars, Max 60

FERRY, JULES 41

FINANCIAL ADMINISTRATION 553-580 (*see also under* Financial System, Revenue, Land Revenue System, Taxation) Burma provincial contract 561-562 changes in provincial contract system 562 563 classification of public funds 563-567 customs duties 576 936 district cess funds 565 district funds 565 566 expenditure and receipts, gross 567 835 expenditure heads 561 562 838 839 expenditure, imperial 564 565 835 expenditure, incorporated local 835 expenditure, objects of 578-580 838 839 expenditure, postal 840 expenditure, provincial 565 835 financial statistics, general 567-573 835-839 funds, local 565 566 funds, municipal 567 general financial statistics 567-573 835-839 imperial expenditure 564 565 835 imperial revenue 564 835 local funds, excluded 566 local funds, incorporated 565 566 835 municipal funds 567 old centralised system 554-558 present system of provincial contracts 558-561 provincial contract system 553-563 provincial expenditure 565 835 provincial revenue 565 835 public funds, classification of 563-567 receipts and expenditure, gross 567 835 reforms of Lord Mayo 557 558 reforms suggested in 1867 556 557 revenue heads 561 562 836 837 revenue, imperial 564 835 revenue, incorporated local 835 revenue, opium 574 836 837 revenue, postal 840 revenue, provincial 565 835 revenue, public 568-578 835-837 statistics of 567-573 835-839 Taunggyi improvement fund 565 566 taxation 568-573

FINANCIAL COMMISSIONER 118 452-454

FINANCIAL STATISTICS 567-573 835-839

FINANCIAL SYSTEM (*see also under* FINANCIAL ADMINISTRATION)

521-552 accounts, general 535 536 accounts of district treasuries 535 administrative procedure in the India Office 529 audit by the civil accountants-general in the provinces 539 540 audit of forest department accounts 541 audit of home accounts 529 530 audit of post office accounts 541 audit of public accounts 539-548 audit of public works accounts 541 audit, test 541 542 auditing, opinion of the Indian Expenditure Commission on Indian 542-548 bronze coinage 549 550 budget 533 534 536 537 central financial department 530 Coinage Act, the Indian 549 550 currency notes in circulation, number and value of 552 currency question 521-528 dimensions and designs of coins 550 district treasuries 530 district treasuries, accounts of 535 estimates of expenditure 536 537 estimates of revenue 533 estimates for public works 538 539 exchange value of the rupee from 1873 to 1899 528 expenditure, civil 533 534 expenditure, estimates of 536 537 expenditure, functions of finance department in relation to 533-537 expenditure, functions of public works department in relation to 537-539 expenditure in England 528 529 expenditure, military 534 537 expenditure, public works 534 537 financial machinery 528-548 forest department accounts, audit of 541 funds, movement of 534 535 general accounts 535 536 home estimates 529 Indian Coinage Act 549 550 Indian Paper Currency Act 551 552 legal tender 550 551 movement of funds 534 535 nickel coinage 549 organisation of finance department 530 Paper Currency Act, the Indian 551 552 post office accounts, audit of 541 public-works audit 541 public works estimates 538 539 revenue, estimates of 533 revenue, functions of finance department in relation to collection of 531-533 revenue system compared with that of the United Kingdom 531 532 revenue system of India, brief outline of 532 533 revenues, responsibility for their administration 528 silver coinage 549 test audit 541 542

FITZPATRICK, SIR DENNIS 155
FOREST ADMINISTRATION 623-657
 (see also under Forests) abstract of the Burma Forest Act 628-636 appointments to the forest service, regulations for 637-648 area of reserved forest 918 area of unclassified State forest 918 commercial exploitation 653-655 expenditure on forests 655-657 920 exploitation, general system of 650-653 finances of the forest department 655-657 915-920 financial results in Lower Burma 916 917 financial results in Upper Burma 916 917 fire, protection from 919 forest expenditure, details of 656 920 forest officers 635 636 forest policy 623-625 forest-produce, control of in transit 634 635 forest revenue, details of 656 918 919 fuel, out-turn of 655 657 915 history of 625-628 imperial forest service 636 leave regulations in forest service 646 647 management of State reserve forests 651-653 officials and their salaries 636 organisation of the forest service 636 637 out-turn of fuel 655 657 915 out-turn of minor forest produce 655 657 out-turn of timber 651 655 915 out-turn, total 918 pensions 646 647 probationers in forest service, regulations for their appointment 637-648 protection of forests and forest produce 632 633 provident fund 648 provincial forest service 636 regulations for appointments to the forest service 637-648 reservation of State forests 648-650 reserved forests 630-632 918 reserved trees 632 633 revenue from forests 655-657 918 919 salaries of officials 636 statistics of 913-920 subordinate forest service 636 teak 11 16 626-628 651 657 915 timber extracted from forests 651 655 915 work of the department 648-656

FORESTS (see also under Forest Administration), administrative classification of 624 625 area of reserved forests 650 918 area of unclassified State forest 918 commercial exploitation 653-655 description of 10-17 624 625 expenditure on 656 920 exploitation, general system of 650-653 fire, protection from 919 management of State reserve forests 651-653 out-turn of fuel 655 657 915 out-turn of minor forest produce 655 657

out-turn of timber 651 655 915 out-turn, total 918 revenue from 655-657 918 919 teak 11 16 626-628 651 657 915 timber extracted from 651 655 915

FORSYTH, SIR DOUGLAS 38 39
FOWLER REPORT on Indian Currency 521 527
FOWLER, SIR HENRY 527
FRYER, SIR FREDERIC 766
FYTCH, COLONEL A. 102

GLOSSARY 1003

GOVERNMENT, British and native methods compared 101-110
GOVERNMENT OF BURMA 90-110
 British and native methods compared 101-110 chief Commissionership created 91 Council of India 93-95 council of the Governor-General of India 93 95-98 council of the Lieutenant-Governor 99-101 435-439 Governor-General of India 93 95-98 historical account of 90-93 legislation by Governor-General of India and his council 97 98 legislation by Lieutenant-Governor and his council 99-101 435-439 legislative business, rules for the conduct of 100 101 435-439 legislative council created 93 Lieutenant-Governor 99-101 Lieutenant-Governorship created 93 native and British methods compared 101-110 Secretary of State for India 93-95

GOVERNOR-GENERAL OF INDIA 93 95-98
GRIERSON, DR. 63 64 65

HAILEYBURY COLLEGE 131 132
 389 390 400

HALL, FIELDING 60 62
HARBOUR ADMINISTRATION 745-761
 accounts and estimates 755-757 Akyab 745 746 Bassein 745 746 borrowing powers 752-754 control of Government 757 758 debt of Rangoon Port 760 disposal of funds 754 755 estimates and accounts 755-757 expenditure of Rangoon Port 761 finances of port of Rangoon 760 761 funds, disposal of 754 755 Government control of 757 758 Kyaukpyu 745 Mergui 745 746 Moulmein 745 746 minor ports, administration of 746 port commissioners, conduct of business by 749-752 port commis-

HARBOUR ADMINISTRATION (*Continued*)

sioners, constitution of 748 749 principal ports and their trade 745 746 Rangoon Port Act 746-759 Rangoon Port administration 746-761 Tavoy 745 746

HARTINGTON, LORD 546

HEADMEN of villages 122 713-733

HERSCHELL REPORT on Indian Currency 521 523-527

HOSPITALS *see under* MEDICAL AND SANITARY ADMINISTRATION

HUNTER, SIR W. W. 568

ILBERT, SIR COURTENAY 93

IMPORTS *see under* TRADE AND SHIPPING

INCOME TAX 576 577

INDIAN COINAGE ACT 549 550

INDIAN PAPER CURRENCY ACT 551 552

INFIRMITIES, population classified according to 84 384 385

INSANITY 84-86 384 385 741

INSEIN REFORMATORY SCHOOL 331-340

IRRAWADDY DIVISION 112 113

IRRIGATION 669-674 *see also under* PUBLIC WORKS

JAIL STATISTICS 262-265 503-512

JAILS *see* PRISON ADMINISTRATION

JOWETT, DR. BENJAMIN 132

JUDICIAL ADMINISTRATION 173-197 483-494 Acts of the Lieutenant-Governor in Council 179 advocates 187 188 Americans, special status of 195-197 appeals in civil cases 186 489 490 appeals in criminal cases 183 184 494 assessors, trial by 195 Bengal Regulation 180 Burma Code 180 Chief Court 181 182 civil courts 181 182 185 186 192 civil justice, statistics of 485-490 civil law 176 Civil Procedure Code 176 177 Code, the Burma 180 codes, the Indian 173-177 criminal courts 181-185 192 criminal justice, statistics of 491-494 criminal law 173-176 Criminal Procedure Code 175 176 Europeans, special status of 195-197 fees of advocates and pleaders 189-191 General Acts of the Governor-General in Council 178 high courts 181 182 Indian Codes 173-177 judicial com-

missioner 182 judicial officers, civil 186 judicial officers, criminal 185 judicial officers, pay of 193 judicial organisation 181 182 judicial statistics 191 192 483-494 jury trials 193-195 language used in the courts 182 183 law officers 182 laws administered in Burma 177-181 Local Acts of the Governor-General in Council 178 native law, when applicable 180 Notifications 179 180 Penal Code 173-175 pay of judicial officers 193 petition-writers 188 189 pleaders 187 powers of civil courts 185 186 reference and revision in criminal cases 184 Regulations 178 179 statistics of 191 192 483-494 trial by assessors 195 trial by jury 193-195 trial of Europeans and Americans 195-197

KACHINS, THE, account of 68 69 infirmities amongst 385 literacy of 83 number of 3 58

KARENNI 781 782

KARENS, THE, account of 64 65 infirmities amongst 385 literacy of 83 number of 3 58

KUHN, E. 59

KYEDANGYI 714

LAND REVENUE POLICY 581-595 alleged connection between revenue policy and famine 582 583 assessment of land revenue, its connection with famine 590-592 assessment of land revenue, three possible causes of hardship in 592 593 ceases on land, suggested limitation of 589 590 connection between revenue assessment and famine 590-592 enhancements, suggested limitation of 588 589 famine and revenue assessment, their connection 590-592 improvements in procedure 587 588 improvements, their exemption from assessment 588 inquiry into 581 582 local rates, incidence of 590 local taxation 590 permanent settlement 583 584 reforms suggested 585-590 ryotwari 584 585 settlements, long and short, compared 588 summary of inquiry into 594 temporary settlement 584 term of settlement 587 zemindari 584

LAND REVENUE SETTLEMENT 857-897 assessment and settlement, principles of 878 879 assessment, object.

LAND REVENUE SETTLEMENT

(Continued)

of 859 860 classification of land 874-877 crop-cutting and statistics of out-turn 863-865 customs, record of native 873 874 demarkation of lands preliminary to survey 860 estimates of production 863-865 forms of registers, statements, and reports 883-897 grants 869 870 grazing grounds 870 holdings 868 869 inspection of land 874-877 leases 870 objects of assessment 859 860 occupation, records of 865-874 proposals and results, report of 880-882 recess 882 883 records of rights and of occupation 865-874 records, preparation of 870-874 registers, statements, and reports, forms used 883-897 report of proposals and results 880-882 reports, statements, and registers, forms used 883-897 rights, record of 865-874 settlement, principles of 878 879 statements, registers, and reports, forms used 883-897 statistics, collection and application of 877 878 survey, revision 862 survey, the 861-863 tenants 870 village history, records of 873 874

LAND REVENUE SYSTEM 581-622

(see also under Land Revenue Policy, and Land Revenue Settlement), agricultural loans 611-613 910 911 capitation tax 609 902 co-operative credit societies 614-622 defaulters, revenue proceedings against 907 fisheries, revenue from 610 905 land occupiers, classification of 909 land rate in lieu of capitation tax 609 903 land revenue, minor sources of 609-611 land revenue policy 581-595 land revenue, statistics of 610 611 899-907 land tenancies, details of 909 land tenures, historical 595 596 land tenures, present 596-602 land tenures, statistics of 601 602 miscellaneous land revenue 609-611 906 mortgages and sales of land 908 ordinary land-revenue, statistics of 901 permanent settlement 583 584 reforms suggested 585-590 revenue from fisheries 610 revenue proceedings against defaulters 907 ryotwari 584 585 sales and mortgages of land 908 settlement, details of 857-897 settlement, system of in Lower Burma 604-606 857-897 settlement, system

of in Upper Burma 606 607 statistics of land revenue 610 611 899-907 summary of inquiry into 594 survey, supplementary 603 607 survey, system of 602-604 temporary settlement 584 thathameda 607-609 730 732 733 904 water-rate 903 zemindari 584

LEFEVRE, J. G. SHAW 132 401

LEGISLATION, by Governor-General of India and his council 97 98 177-179 by Lieutenant-Governor and his council 99-101 179 435-439 by Regulation 98 by temporary Ordinances 98 conduct of legislative business, rules for the 100 101 435-439 in force in Burma 177-181 for Scheduled Districts 98

LEGISLATIVE BUSINESS, Rules for the conduct of 100 101 435-439

LEPROSY 88 89 384 385 741 785 925

LIEUTENANT-GOVERNOR 99-101 117

LOWELL, A. LAWRENCE 129 132

LOWIS, C. C. 58 59 73 77 84

LUNATIC ASYLUM 741

LYONS, LORD 41

MACAULAY COMMISSION on Indian Civil Service 132-135 387-401

MACAULAY, LORD 132 157 173 401

MACLAGAN, EDWARD DOUGLAS 85

MACMAHON, COLONEL 64

MAHA THA-MIMDAM RAJAH 35 36

MALARIAL FEVERS 738 925

MANDALAY CANAL 670 671

MANDALAY DIVISION 113 114

MANUHA, KING 67

MASON, DR. 60 64 65

MAYO, LORD 556 557

MCLEOD, CAPTAIN 30

MEDICAL AND SANITARY ADMINISTRATION 734-744 921-929

civil surgeoncies 737 diseases, principal, treated in hospitals 738 925

expenditure on 742 924 expenditure on civil sanitary works 744 hospitals, classification of 734 735 leprosy 741 lunatic asylum 741 medical institutions, number of 735

medical department, staff of 735-738

medical department, work of 738-740

medical officers, appointment of 735-737

medical officers, salaries of 737

operations, surgical 738 739

patients treated in hospitals for principal diseases 738 925

plague

MEDICAL AND SANITARY ADMINISTRATION (*Continued*)

740 salaries of medical officers 737
sanitary administration 742-744 statistics of 921-926 surgical operations 738 739 vaccination 739 740 926 vital statistics 927-929

MEDICAL STATISTICS 921-929

MEIKTILA DIVISION 114

MELVILL, DR. HENRY 132

MILITARY POLICE *see under* POLICE, MILITARY

MINBU DIVISION 114

MINDON MIN, KING 23 36-40

MÓN CANALS 671

MORPHIA, rules for the manufacture, possession, and sale of 854 855

MOUNG BHE 31

MOUNG BHEIN 31

MUNICIPAL ADMINISTRATION 680-

711 committees 681 707 committees, their organisation and powers 685-696 699-701 constitution of municipalities 684 685 707 control by Government 701-706 debt 682 683 expenditure 708-711 finance 682 707-711 funds and property 698 699 general review of 680 681 Government control of 701-706 Municipal Act, the Burma 683-706 municipal committees 681 707 municipal committees, their organisation and powers 685-696 699-701 municipal debt 682 683 municipal expenditure 708-711 municipal finance 682 707-711 municipal funds and property 698 699 municipal revenue 707 708 710 municipal taxation 683 696-698 municipalities, constitution of 684 685 707 municipalities, number of 681 707 municipalities, population of 681 707 municipalities, statistics relating to 706-711 number of municipalities 681 707 offences affecting public health, safety, or convenience 701 population of municipalities 681 707 property and funds 698 699 public health, safety, or convenience, offences respecting 701 Rangoon municipality 680 681 710 711 revenue 707 708 710 review of 680 681 sanitation 699-701 small towns 706 statistics of 706-711 taxation 683 696-698 towns, small 706

MYINGAUNG 715

MYOÖKS, their duties 122

MYOTHUGYI 715 716 717 722

NAT-WORSHIP 74 75

NATIVE METHODS of government compared with British methods 101-110

NATIVES, their employment in civil service 155-161

NGA CHO 57

NISBET, DR. JOHN 36 38 596 608 625 648 665 674

NON-REGULATION PROVINCE, definition of 91

OCCUPATIONS, classification of population according to 75 76 360-380

O'CONNOR, V. C. SCOTT 60

OFFICIAL CORRESPONDENCE, rules for 443-449

OFFICIALS (*see also under each department, as Public Works, Police, etc.*) leave rules for 169-172 pensions of 163-169 212-214 457-482 retirement of 164 166 salaries of 161-163 training, selection, and appointment of 129-161 389-401

OPIUM REGULATIONS 843-855

OPIUM REVENUE 574 836 857

PACIFICATION of Upper Burma 45-57

PAGAN MIN, KING 23 30 31 36

PAKOKKU CHIN HILLS 115

PAPER CURRENCY ACT, THE INDIAN 551 552

PEGU DIVISION 112

PENSIONS 163-169 457-482 646 647

PHAYRE, SIR ARTHUR 36 37

PIGOTT, F. T. 180

PILCHER, MR. 63 64

PLAGUE 740

POLICE ADMINISTRATION 198-230 (*see also under* POLICE, CIVIL, and POLICE, MILITARY)

POLICE, CIVIL 198-219 administrative areas 200 201 appointments in 201 202 armament of 208 caste of officers and men 208 conditions of service in 203 cost of 499 crime, statistics of 215-218 228-230 491-494 501 502 discipline and internal management 219 enlistments in 201 202 examinations for 204 leave 209 210 number of 200 497 officers of 200 organisation of 199-201 pay of all ranks 210-212 pensions 212-214 478 479 promotion in 204 205 provident fund 214 215 punitive police 218 race of officers and men 208 Rangoon Town Police 227-230 religion of

POLICE, CIVIL (*Continued*)

officers and men 208 rewards, system of 205-207 salaries of all ranks 210-212 strength of 200 497 training of 203 204 work of 215-218

POLICE, MILITARY 51 52 219-227

cost of 500 discipline and internal management 226 227 general description of 219-221 leave 221-223 number of 221 498 officers of 221 pay 223 pensions 223-226 promotion in 220 strength of 221 498

PONGYI 72-75 81**POPULATION** 2 3 58-89 355-385

according to age, sex, language, religion, and literacy 382 according to age, sex, religion, and literacy 381 according to infirmities, by districts 384 according to infirmities, by race 385 according to literacy 77-84 381-383 according to literacy by districts and natural divisions 383 according to occupations 75 76 360-380 according to religions 2 71 358 359 indigenous 3 58-69 83 357 non-indigenous 69 70 357

PORT ADMINISTRATION *see* **HARBOUR ADMINISTRATION****POSTAL STATISTICS** 840 841**PRENDERGAST, MAJOR-GENERAL** 43**PRINCE OF PROME** 30**PRINCE OF WALES** (now King Edward VII) 39**PRINCE, THE NYAUNGYAN** 40**PRINCE, THE TAROOP-MAW** 30**PRISON ADMINISTRATION** 231-265

appointments 250 central jails 231 232 classification of jails 231 232 convict overseers 254 255 convict warders 255 256 convict watchmen 254 convicts employed as officials 253-256 cost of 262 263 510 511 deaths in jails 265 509 512 discipline of convicts 256-261 discipline of officials 251-253 district jails 231 232 duties of jail officials 236-250 employment of convicts as jail officials 253-256 finances 262 263 510 511 good-conduct marks 265 group superintendent 251 industries in prisons 261 inspection 234-236 inspector-general 232-234 jail department, staff of 236 jailers 249 labour performed by convicts 261 mark system 265 medical officer 240-244 medical subordinates 245-249 military drill of jail

officials 249 mortality in jails 265 512 offences, prison 256-261 pay of jail officials 236 prison industries 261 prison offences 256-261 promotion 250 251 punishments allowed 259-261 punishments of prison offences 256-261 salaries of jail officials 236 security furnished by officials 250 sickness in jails 265 512 statistics of 262-265 503-512 superintendents 236-240 supervision 232-236 visitors to jails 234-236

PROVINCIAL CONTRACT 553-563**PROVINCIAL RATES** 576**PUBLIC INSTRUCTION** 266-340 513-

520 administration of, in Burma 290-340 agricultural education 286 287 industrial schools 285 boarding-houses 288 Burma Educational Syndicate 294-300 classification of schools and colleges 301-305 commercial education 285 286 cost of 312-314 519 defects of present system 269 270 discipline 325 326 education and the Government service 270-272 education of Europeans and Eurasians 282 283 education of native chiefs and nobles 283 education of women 280 educational policy 267-290 Educational Syndicate, the Burma 294-300 ethics of education 278 279 examinations, abuse of 272 273 examinations, teachers' 307-309 expenditure on 312-314 extent of, in India 269 female education 280 Government control 273 grant-in-aid system 315-331 history of Indian education since 1854, 268 269 history of Indian education to 1854, 267 268 hostels 288 Indian educational policy 267-290 Insein Reformatory School 331-340 inspection 288 289 291 292 itinerant teachers 329 330 languages used 279 280 merits of present system 269 270 moral training 325 326 municipal control of 292-294 normal schools 305 306 308 309 number of institutions 309 310 515 516 officials of educational services 289 300 pay of officials 300 301 primary education 273-277 private enterprise in 273 private institution defined 302 public institution defined 302 pupil teachers 306 330 Reformatory, the Insein 331-340 responsibility for 290 291 salaries in education department 300 301 scholars, classified according

PUBLIC INSTRUCTION (*Continued*)

to sex and race or creed 520 scholars, classified according to stages of instruction 311 312 517 518 scholars, number of 309-312 515 516 scholarships 314 315 school, aided, defined 302 school, Government, defined 305 school, indigenous, defined 302 school, municipal, defined 305 school, Insein reformatory 331-340 schools, art 284 schools, classified according to management 310 311 schools, classification of 301-305 schools, normal or training 305 306 308 309 schools, number of 309 310 515 516 schools, primary 303 304 schools, secondary 303 304 secondary education 277 278 selection and training of teachers 305-309 staff of education department 300 stages of instruction 304 311 312 517 518 statistics of 309-314 513-520 teachers' certificates 307-309 teachers, itinerant 329 330 teachers, pupil 306 330 teachers, their selection and training 305-309 technical education 283 284 training and selection of teachers 305-309 training schools 305 306 308 309 training colleges 287 288 university education 280-282

PUBLIC WORKS 658-679 (*see also under Public Works Department*) accounts branch 659 660 appointments 659-662 buildings and roads branch 662-669 capital expenditure on imperial irrigation works 671 672 civil buildings, expenditure on 664 665 civil works, imperial 664 classification of 662 663 communications 665-667 communications, expenditure on 666 department, organisation of 658-662 embankments 672 establishments, expenditure on 668 669 executive branch 660-662 expenditure, capital, on imperial irrigation works 671 672 expenditure, general analysis of in buildings and roads branch 668 669 expenditure on 663 expenditure on civil buildings 664 665 expenditure on communications 666 expenditure on irrigation 669 670 expenditure on military works 664 expenditure on minor irrigation works and navigation 672-674 expenditure on miscellaneous public improvements 667 general organisation of the department 658-662 irrigation works, imperial, capital

expenditure on 671 672 irrigation, expenditure on 669 670 irrigation works 669-674 irrigation works, imperial 670-672 irrigation works, minor 672-674 Mandalay canal 670 671 military works 663 664 minor irrigation works 672-674 miscellaneous public improvements 667 Môn canals 671 organisation of the department 658-662 pay of officials 659 661 plant, expenditure on 668 669 railways, finances of 678 railways, historical 674-676 railways, length of line open 677 railways, working of 676-678 salaries 659 661 Shwebo canal 671 tools, expenditure on 668 669

PUBLIC WORKS DEPARTMENT 118

119 537-539 541 658-652 (*see also under Public Works*) audit of accounts 541 estimates 538 539 famine protective works 538 financial administration of 538 military works 537 operations of 537 organisation of 658-662 railways 538 telegraphs 537 work of 537

RACES (*see also under each race*) indigenous 3 58-69 non-indigenous 69 70

RAILWAYS 674-679

RAINFALL 7-9 430-432

RANGOON, crime in 229 230 municipality of 680 710 711 Port Act 746-759 port administration 746-761 port debt 760 port expenditure 760 761 port revenue 760 town police 227-230 500

REFORMATORY SCHOOL, THE IN-SEIN 331-340

REGULATION PROVINCE, definition of 91

RELIGIONS, Animism, 74 75 Buddhism 71-74 literacy of adherents of various 84 Nat-worship 74 75 population classified according to 2 71 538 539 Shamanism 74 75

REVENUE, PUBLIC 568-578 835-837 (*see also under Taxation, Land Revenue System*) cost of collecting 577 578 customs 576 936 discrepancies in official reports 575 576 distinction between revenue and receipts 573 excise 575 from taxation and from other sources 568 569 main heads of 573 574 opium 574 provincial rates 576 rate of, *per capita* 570 receipts

- REVENUE, PUBLIC (*Continued*)
 and revenue, distinction between 573
 relation of, to value of exports 573
 salt 574 stamp 574 575 statistics of
 835-837 sources of 573-577
- RUPEE, exchange value of from 1873-
 1899, 528
- RYOTWARI 584 585
- SAGAING DIVISION 114 116
- SALISBURY, LORD 135
- SALT REVENUE 574
- SANGERMANO, FATHER 61 62
- SANITARY ADMINISTRATION 742-
 744
- SCHEDULED DISTRICT defined 98
- SCHOOLS *see under* PUBLIC IN-
 STRUCTION
- SCOTT, SIR GEORGE 60 62-65 770
- SECRETARIAT 117 118 449-454
- SECRETARY OF STATE FOR INDIA
 93-95
- SHAMANISM 74 75
- SHAN STATES 114 115 762-782 ad-
 ministration of 772-782 agricultural
 products 770 771 area of 772-775
 British occupation of 766-770 British
 rule, permanence of 769 770 civil
 cases, statistics of 780 civil justice
 776-780 coal in 771 criminal cases,
 statistics of 779 criminal justice 769
 776-779 description of the country
 762-764 education of Chiefs' sons 769
 financial affairs 768 gold in 772 in-
 habitants of 62-64 764 765 iron ore
 in 771 772 Karenni 781 782 medi-
 cal aid in 768 mineral products 771
 772 Myelat, the 773 774 778-780
 Northern Shan States 772 773 popu-
 lation of 773-775 powers of Govern-
 ment of Burma in 775 776 products
 of 770-772 progress under British
 rule 767 revenue of 773-775 sanads
 granted to Karenni chiefs 781 782
 Southern Shan States 772 774 States
 under the control of commissioners
 778 779 tribute paid by 773-775
- SHANS, THE, account of 62-64 764
 765 infirmities amongst 385 literacy
 of 83 number of 3 58 origin of 62
 63
- SHAW, MR. 41
- SHIPPING, COASTING 829 830 969-
 972
- SHIPPING, FOREIGN 827-829 965-
 968
- SHORE, SIR JOHN 24
- SHWEBO CANAL 671
- SMALL-POX 738-740 925
- SMEATON, MR. 64
- SNODGRASS, MAJOR 27
- SPEARMAN, COLONEL 64
- STAMP REVENUE 574 575
- STANDARD of living in tropical and
 in non-tropical countries 571
- STEPHEN, SIR JAMES FITZJAMES
 174
- STEPHENS, H. MORSE 132
- STOKES, DR. 174
- STRACHEY, GENERAL 556 557
- STRACHEY, SIR JOHN 91 175 196
 568
- SUPAYALAT, QUEEN 40
- SYMES, CAPTAIN (afterwards Colonel)
 24 25
- TAIK 714
- TALAINGS, THE, account of 66 in-
 firmities amongst 385 literacy of 83
 number of 3 58
- TAUNGTHUS, THE, account of 67 68
 infirmities amongst 385 number of
 3 58
- TAW SEIN KO, MR. 73
- TAXATION 568-577 (*see also under*
 Revenue, Land Revenue System) al-
 ternative method of estimating the
 weight of 570-573 assessed taxes
 576 577 income tax 576 577 cus-
 toms duties 576 936 *per capita* fig-
 ures no true index of 570 rate of,
per capita 569 570 relation of, to
 value of exports 572 573 revenue
 derived from 568 569
- TEAK 11 16 626-628 651 657 915
 964
- TELEGRAPHS 537
- TEMPERATURE 9 10 425-429 432
- TENASSERIM DIVISION 113
- THARRAWADDY, KING 29 30 31
- THATHAMEDA 607-609 730 732 733
 904
- THEWETHAUKGYI 715
- THIBAW, KING 23 39-44 766
- THUGYI 714 716
- TRADE AND SHIPPING 799-830
 931-972 (*a detailed list of all the trade
 and shipping tables will be found on
 pp 931-933*) defects in Indian trade
 statistics 799 800 exports, coasting
 818-821 944 951-955 exports, coast-
 ing, by articles 820 821 955 exports,
 coasting, by country of destination
 818-820 951-954 exports, dutiable

TRADE AND SHIPPING (*Continued*)

- and free 576 827 936 exports, foreign 808-811 941-943 exports, foreign, by articles 809-811 943 exports, foreign, by country of destination 808 809 941 942 exports, government 821-823 958 exports of rice 963 exports of teak 964 exports, of treasure 823 957 exports, total value of 800 801 935 exports, trans-frontier 824-827 961 962 exports, trans-frontier, by articles 826 827 962 exports, trans-frontier, by country of destination 825 961 government stores, import and export of 821-823 958 imports, coasting 811-818 944-950 imports, coasting, by articles 815-818 949 950 imports, coasting, by country of origin 813-815 945-948 imports, dutiable and free 576 827 936 imports, foreign 802-808 937-940 imports, foreign, by articles 804-808 939 940 imports, foreign, by country of origin 802-804 937 938 imports, government 821-823 958 imports, of treasure 823 956 imports, total value of 800, 801 935 imports, trans-frontier 824-827 959 960 imports, trans-frontier, by articles 825 826 960 imports, trans-frontier, by country of origin 824 959 maritime trade, aggregate 800-802 maritime trade, growth of 801 rice, quantity and value of, exported 963 shipping 827-830 965-972 trans-frontier trade 824-827 959-962 treasure, import and export of 823 956 957
- TRADE, internal and external, compared 571 572
- TREASURE, import and export of 823 956 957
- TREATY OF RA-TA-NA-PARA 28 29 347-349
- TREATY OF YANDABOO 24 27 28 29 30 345-347
- TREATY OF 1867, 37 38 351-353
- TREATY OF 1862, 37 349-351
- TREATIES relating to Burma 343-353
- TUBERCULAR DISEASES 738 925
- TUCK, H. N. 784
- TULLOCH, MAJOR 27

VACCINATION 739 740 926

VEGETATION 17 18

VENEREAL DISEASES 738 925

VICEROY OF INDIA *see* GOVERNOR-GENERAL OF INDIA

VILLAGE ADMINISTRATION 122 712-733 crime, responsibility of villagers in regard to 720 721 Crosthwaite, Sir Charles, his minute on 712-717 difficulties encountered 715 716 fines imposed on villages 721 fines inflicted by headmen 720 headmen and their duties 722-733 headmen, civil jurisdiction of 719 720 headmen, criminal jurisdiction of 718 719 headmen of villages 713-733 headmen, fines inflicted by 720 headmen, number, power, and discipline of 718 individual not to be administrative unit 716 717 kyedangyi 714 minute by Sir Charles Crosthwaite on 712-717 myingaungs 715 myothugyi 715 716 717 722 origin of village system in Upper Burma 712-717 responsibility of villagers in regard to crime 720 721 sanitation 726-730 taik 714 thathameda 730 732 733 thwethaukyis 715 thugyi 714 716 unit of administration to be the village not the individual 716 717 Upper Burma Village Regulation 717-720 village headmen 713-733 village headmen and their duties 722-733 Village Regulation of Upper Burma 717-720 village system, origin of 712-717 village system under native rule 713 714 village to be administrative unit 716 717 villages, fines imposed on 721 villagers, their responsibility in regard to crime 720 721 yawathugyi 717

VILLAGE HEADMEN 122 713-733

VITAL STATISTICS 927-929

WALLICH, DR. 625

WARS, BURMESE 22-44

WEIGHTS AND MEASURES, Burmese and Indian 842

WELBY, LORD 542

WELLESLEY, LORD 24 130 131

WESTLAND, SIR JAMES 532

WILSON, MR. 532

WOMEN, literacy of 83 84 number engaged in commerce 76

YWATHUGYI 717

ZEMINDARI 584

POLITICAL MAP

FAR EASTERN TROPICS

PREPARED FOR INLAND DEPT. ON

CHANGING ADMINISTRATION IN THE FAR EAST

REFERENCE MAPS TO CHANGING

ADMINISTRATION

British Colonies and Protectorates

French Colonies and Protectorates

Dutch Colonies and Protectorates

German Colonies and Protectorates

Japanese Colonies and Protectorates

Unincorporated States

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

Other

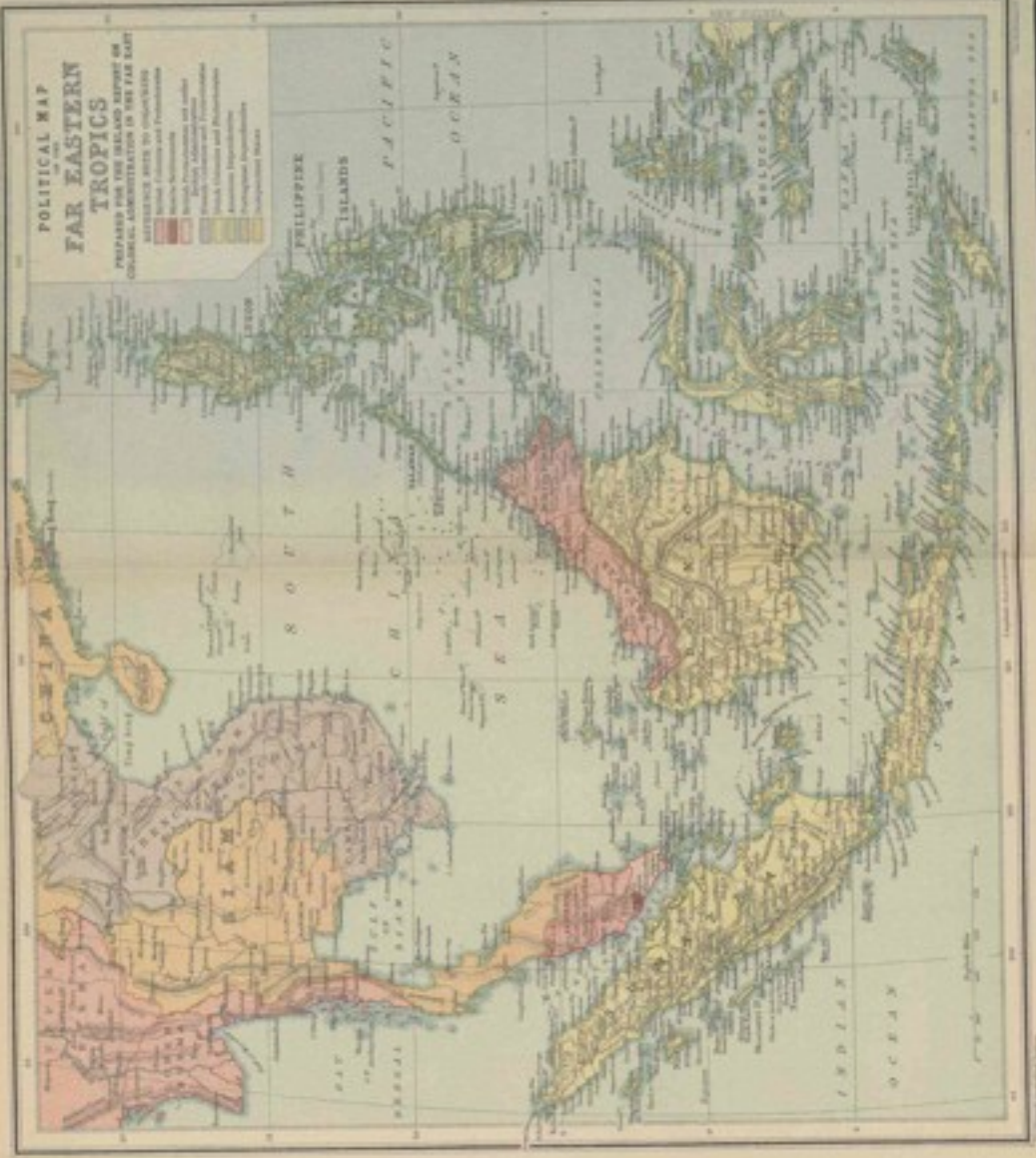
Other

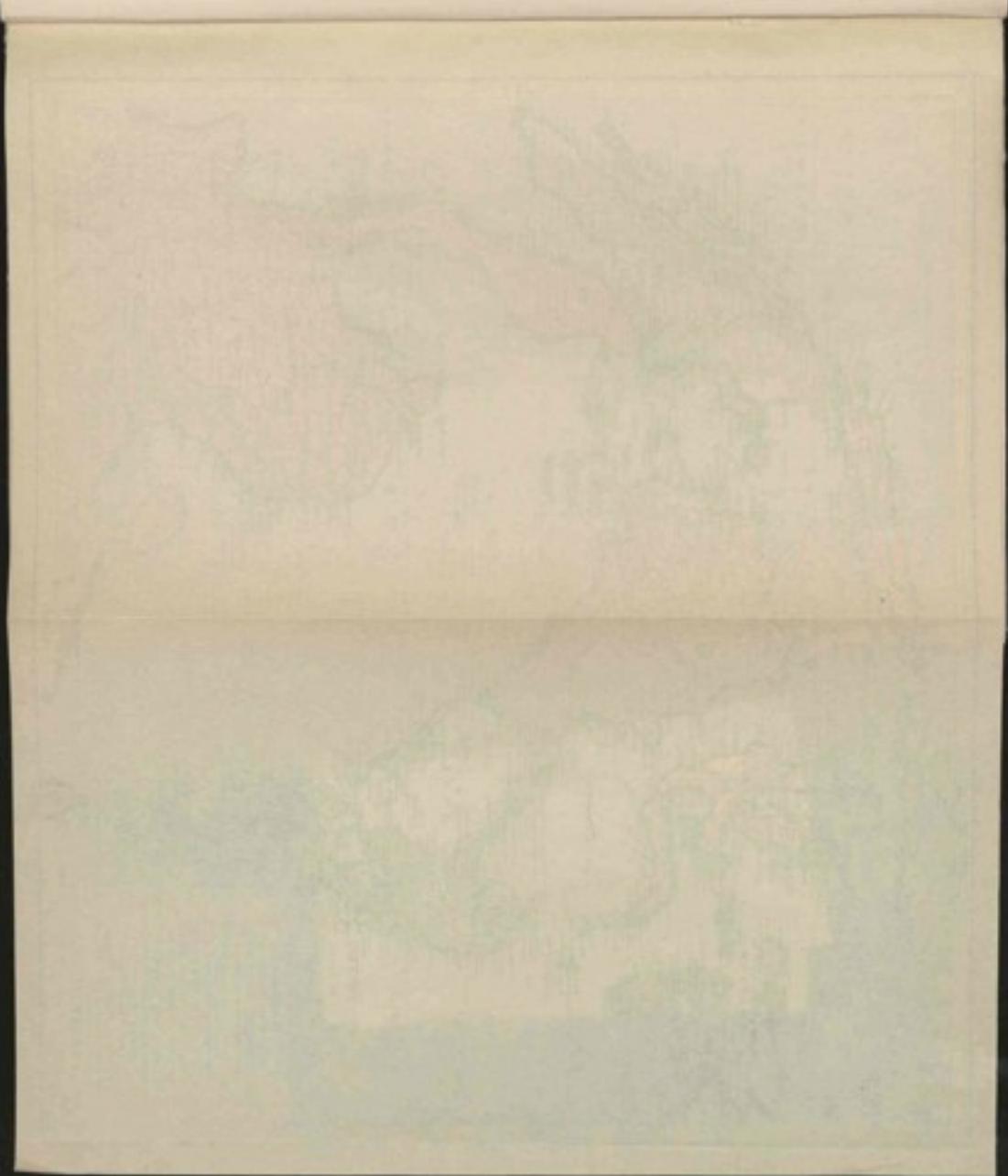
Other

Other

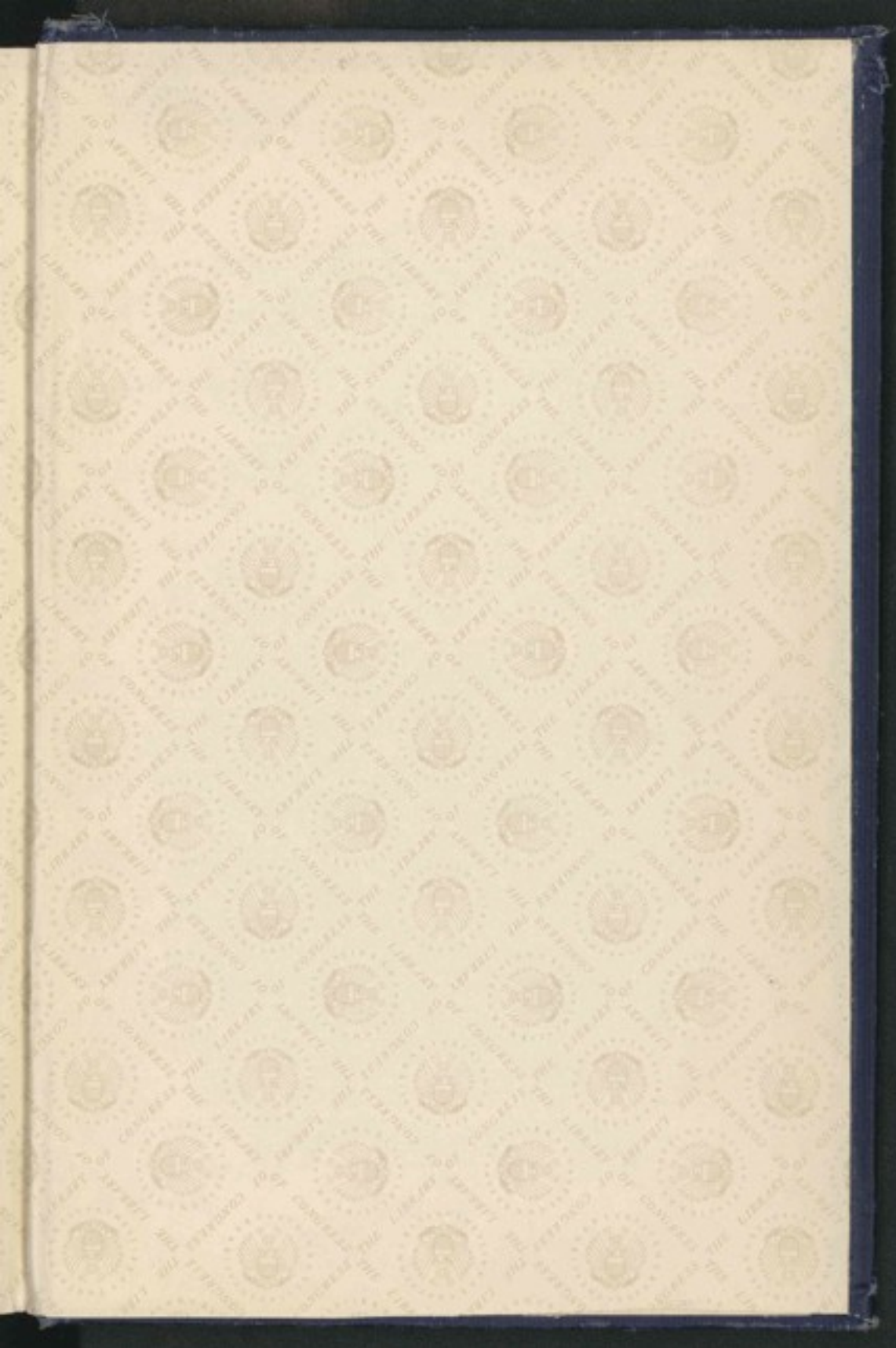
Other

Other









LIBRARY OF CONGRESS



0 020 598 188 3