

CEYLON.



ADMINISTRATION REPORTS, 1901.

PART II.—SCIENTIFIC.

PUBLIC WORKS.

REPORT OF THE HON. MR. F. A. COOPER, C.M.G., M.I.C.E., &c..

DIRECTOR OF PUBLIC WORKS.

PART II.—SCIENTIFIC.

PUBLIC WORKS.

REPORT OF THE DIRECTOR OF PUBLIC WORKS FOR 1901.

I HAVE the honour to submit the following report upon the operations of the Public Works Department during the year 1901.

EXPENDITURE.

2. The total expenditure during the year under review was Rs. 4,554,648·48, classified as follows :—

		Rs. c.
Personal Emoluments	...	428,948 98
Annually Recurrent Works	...	2,112,905 52
Extraordinary Public Works	...	1,348,031 77
Chargeable to Loans and other Funds	...	666,027 80
		<hr/> Total ... 4,555,914 7

3. In Appendix 1 will be found the annually recurrent expenditure charged against votes in the Supply Bill, and in Appendix 1 A that charged against commutation and private contribution funds.

In Appendix 2 will be found the expenditure upon extraordinary public works charged against votes in the Supply Bill, and in Appendix 2 A that charged against Road Committee and private contribution funds.

In Appendix 3 will be found the total expenditure classified under the several headings of account in each Province, including that charged against loans and other funds.

4. The total expenditure in the several Provinces was as follows :—

Province.	Annually Recurrent.	Extraordinary, including Loan Works.		Total.	
		Rs.	c.	Rs.	c.
Western	536,585 36*	715,724	19*	1,252,309	55*
Central	419,537 98	333,429	56	752,967	54
Northern	130,280 0	47,988	66	178,268	66
Southern	197,214 2	171,450	76	368,664	78
Eastern	131,414 56	123,272	21	254,686	77
North-Western	196,665 17	146,537	55	343,202	72
North-Central	117,119 47	71,671	80	188,791	27
Uva	192,823 79	267,565	86	460,389	65
Sabaragamuwa	191,265 17	136,418	98	327,684	15
Total	2,112,905 52	2,014,059	57	4,126,965	9
		Establishment		428,948	98
		Total	...	4,555,914	7

* Including expenditure under heading "Miscellaneous," Statement No. 3.

MAINTENANCE OF ROADS.

5. The roads in this Colony are classified under the following description :—Metalled, Track Metalled, Gravelled, and Natural. The total length maintained during the year in each Province was as follows :—

Province.	Metalled.	Track Metalled.	Gravelled.	Natural.	Total.
	Miles.	Miles.	Miles.	Miles.	Miles.
Western	295·26	—	62·94	—	35820
Central	534·33	—	70·74	65·25	67033
Northern	310·00	—	86·50	121·00	517·50
Southern	272·78	—	47·50	—	320·28
Eastern	162·25	—	132·60	54·00	348·85
North-Western	175·67	143·00	76·71	30·00	425·38
North-Central	101·78	68·75	138·28	8·60	317·41
Uva	246·03	—	25·33	102·00	373·36
Sabaragamuwa	185·97	80·59	17·94	25·00	309·50
Total	2,284·07	292·34	658·54	405·85	3,640·80

The above statement shows an increase of 51·87 miles of roads in charge of this Department. This is due to the completion of the Annfield road, extension of the Madampe-Hambantota road, and the transfer of the Matara-Akuressa road, Maradankada wela-Habarana, and Kekirawa-Talawe roads from the Provincial Road Committee to this Department.

6. In Appendix 4 will be found a return giving the name of each road, its length, description, and particulars as to cost of maintenance, and the average traffic as far as it can be even approximately ascertained, no special means for this purpose being at the disposal of the Department.

7. The average cost per mile of road upkeep in the several Provinces was as follows :—

Province.	Metalled.	Track Metalled.	Gravelled.	Natural.	General Average.
	Rs.	Rs.	Rs.	Rs.	Rs.
Western	806	—	315	—	720
Central	629	—	233	77	533
Northern	273	—	181	52	206
Southern	577	—	180	—	518
Eastern	456	—	229	20	302
North-Western	409	461	245	33	370
North-Central	436	—	174	—	310
Uva	651	—	284	71	467
Sabaragamuwa	661	437	270	97	535

The general average throughout the Colony was :—Metalled roads Rs. 549 per mile, gravelled roads Rs. 221 per mile, natural roads Rs. 57 per mile.

8. The whole of the roads have been, with few exceptions, maintained in a satisfactory condition, considering their respective classes and the traffic upon them. The improved condition of the roads in the Central Province mentioned in my last report has been maintained. Representation has been made by the Dimbula Planters' Association that additional width and protection are required in respect of some of the roads, and is being inquired into; this, however, is a question to be dealt with under road improvement rather than that of maintenance.

The improvement of the roads in the Western and North-Western Provinces is being extended.

A considerable amount of rooting out of jungle and scrub on the road sides has been effected in the Provinces of Uva and Sabaragamuwa, which will have a marked effect for good in the maintenance of the roads in future.

The roads in the Northern Province have been somewhat disturbed by the construction of the railway, but their general condition is good.

In the North-Central Province the expenditure on road maintenance is still low, and I regret the difficulties experienced with regard to labour in the Province has not admitted of full advantage being taken of the increased provision made in the Supply Bill for the year under review.

The following roads have been handed over to the Anuradhapura Local Board :—Approach roads to public buildings, Anuradhapura; the Inner and Outer Circular roads, Anuradhapura.

On the completion of the Northern Railway it is probable that the through traffic on some of the roads will be considerably reduced, but in course of time the local traffic on those serving the railway will considerably increase.

In the Eastern Province the improvement of the condition of the roads generally is progressing satisfactorily.

The work of replacing the old wooden bridges with iron and concrete structures throughout the Island is making satisfactory progress.

MAINTENANCE OF INLAND NAVIGATION.

9. No exceptional expenditure has been incurred under this heading.

FLOOD OUTLETS.

10. No work of any magnitude has been necessary for the maintenance of the existing flood outlets.

REPAIRS TO BUILDINGS.

11. The buildings in charge of this Department, classified in accordance with the classification in the Supply Bill, were as follows :—

Province.	Government Buildings, exclusive of Police and Hospital Buildings.	Queen's Houses.	Police Buildings.	Medical Aid Hospitals.	Government Hospitals and Dispensaries.	Total.
Western	89	1	16	1	31	138
Central	94	2	16	19	15	146
Northern	172	1	3	—	19	195
Southern	82	—	15	—	19	116
Eastern	62	—	1	—	17	80
North-Western	48	—	4	—	15	67
North-Central	55	—	—	—	14	69
Uva	35	—	1	4	6	46
Sabaragamuwa	46	—	4	4	12	66
Total	683	4	60	28	148	923

12. The following tabular statement shows the average expenditure per building during the year in each of the several Provinces :—

Province.	Government Buildings, exclusive of Police and Hospital Buildings.	Queen's Houses.	Police Buildings.	Medical Aid Hospitals	Government Hospitals and Dispensaries.
	Rs.	Rs.	Rs.	Rs.	Rs.
Western	270	3,518	250	752	417
Central	131	1,548	155	336	420
Northern	43	205	151	—	123
Southern	113	—	80	—	93
Eastern	104	—	331	—	88
North-Western	90	—	106	—	131
North-Central	149	—	—	—	159
Uva	99	—	224	201	315
Sabaragamuwa	101	—	135	482	110

Generally speaking, the maintenance of buildings has been much improved of late, especially in the Central Province. This is owing to a considerable extent to the separate provision made in the Supply Bill since 1897 for their maintenance ; previous to that year there was only one vote, instead of two as is now the case, which included additions and alterations as well as maintenance.

REPAIRS TO BRIDGES EXCEEDING FIFTY FEET IN LENGTH.

13. The usual repairs have been effected. The wooden bridge at Dandugama referred to in my last annual report has been replaced by an iron structure having three spans of 80 ft. The work of replacing the bridge at Wellampitiya in the Western Province and those over the Sengal-oya and Lunu-oya in the North-Western Province is in progress.

WORKS UNDERTAKEN DURING 1901.

14. The year under review has been an exceptionally eventful one. On the 23rd January the sad news of the death of our Most Gracious Sovereign Lady Queen Victoria reached the Colony.

On the 12th April Their Royal Highnesses the Duke and Duchess of Cornwall and York landed in Colombo and visited Kandy.

The duties devolving on the officers of this Department in connection with the above events were loyally and efficiently performed.

The following are the more important works that have been under construction during the year :—

In the Western Province.

Magazine for storage of explosives.
Minor Courts, Hulftsdorp.
Dehiwala flood outlet.
Improvements, Kew barracks.
New roads, Havelock park.
New roads in Customs premises.
Improvements of road, Pasyala to Attanagalla.
Construction of Dandugama bridge.
Construction of Wellampitiya bridge.
Renewal of platform and widening Digarolla bridge.
Erection of jetties, sheds, and quay wall, Customs premises, Colombo.
Construction of cooly camp, Ragama.

In the Central Province.

Hospital at Dimbula.
Hospital at Maturata.
Peradeniya resthouse.
Police station and barracks, Dimbula.
Hospital at Pussellawa.
Construction of Annfield road.
Improvement of the Palapatwela-Galawela road.
Improvement of the Aladeniya-Iriyagama road.
Improvement of the Kadugannawa-Alagalla road.
Construction of bridge over the Tammana-oya, Matale District.
Construction of bridge over the Talwata-oya.
Construction of bridges, Beligamuwa-Mirisgonioya road.
Water supply, Hakgala Gardens.

In the Northern Province.

Construction of Mantai-Illupakadavai road.
Construction of Mannar-Pesalai road.

In the Southern Province.

New Kachcheri, Hambantota.
New court-house, Hambantota.
Improvement of the Hambantota-Bundalla road.
Improvement of the Matara-Akuressa road.
Reconstruction of Galle road bridges.

In the Eastern Province.

Landing jetty, Trincomalee.
 District Judge's quarters, Batticaloa.
 Kantalai resthouse.
 Sengaladi resthouse.
 Landing jetty, Kalkuda.
 Extension of South Coast road.
 Construction of road to Muttur ferry.
 Construction of road to Toppur.
 Construction of Periyamukutuwaran causeway.
 Construction of Mohideentanda bridge and causeway.

In the North-Western Province.

Powder magazine, Kurunegala.
 Land Registry Office, Kurunegala.
 District Engineer's quarters and workshops, Chilaw.
 Construction of bridge over the Battulu-oya.
 Construction of bridge over the Sengal-oya.
 Construction of bridge over the Lunu-oya.

In the North-Central Province.

Archaeological Commissioner's house, Anuradhapura.
 Court-house, Anuradhapura.
 Construction of Habarana-Topawewa road.

In the Province of Uva.

New court-house, Bandarawela.
 New police station, Bandarawela.
 Construction of Bibile-Medagama road.
 Construction of Nakala bridge.

In the Province of Sabaragamuwa

Permanent wards, Civil Hospital, Kegalla.
 Permanent wards, Civil Hospital, Karawanella.
 Land Registry Office, Kegalla.
 Avisawella hospital extension.
 Construction of the Madlampe-Hambantota road.
 Construction of causeway at Algoda.
 Rebuilding bridge on the Ratnapura-Nambapana road.
 Rebuilding bridge on the Ratnapura-Halpe road.

15. I will now proceed to briefly enumerate the various works that have been undertaken by the Department during the year in the several Provinces under the headings Annually Recurrent, Extraordinary, and Works chargeable to Loans.

A large proportion of the information has been taken from the annual reports furnished by the Provincial Engineers.

WESTERN PROVINCE.

Annually Recurrent Works.

16. *Maintenance of Roads.*—The Provincial Engineer reports that the roads have been maintained in fair order, and some of them considerably improved, notably the Colombo-Negombo and the Horana-Panadure roads. The Badureliya-Kukulgama road has been handed over to the Kalutara District Road Committee, and this Department placed in charge of the road from Horawella to Moragalla resthouse.

17. *Maintenance of Inland Navigation.*—The canals have been maintained in fair order.
 18. *Repairs to Buildings.*—The permanent buildings have been maintained in fair order.
 19. *Maintenance of Customs Wharves, Jetties, and Cranes.*—The usual repairs have been effected.
 20. *Additions and Alterations to Buildings.*—The following works have been carried out during the year:—

Post Office—re-arrangement of partitions and minor alterations.
 General Hospital—minor alterations and additions.
 Public Instruction Office—minor improvements.
 Convict Hospital, Borella—providing glass tiles.
 Kotahena Police Barracks—water service.
 Central Timber Depôt—improvements to entrance.
 Colombo Customs—minor improvements.
 School of Agriculture—new latrine and bathroom.
 Census Superintendent's Office—new shelving.
 Principal Civil Medical Officer's Office—minor improvements.
 Infectious Diseases Hospital, Kanatta—construction of four bathing-places.
 Master Attendant's Office—conversion of a portion of verandah into prisoners' dock.
 Colonial Secretary's Office—minor improvements.
 Bacteriological Institute—conversion of temporary bridge into permanent structure.
 Female Ward, Lunatic Asylum—minor alterations.

21. *Repairs to Bridges.*—The usual repairs have been effected.
 22. *Miscellaneous.*—Minor works have been carried out at the Customs premises, Hulftsdorp Law Courts, Cinnamon Gardens Police Station, and Pilots' Tower.
 A survey of the main road from Horawella to Moragalla, 5 miles in length, has been completed.

*Public Works Extraordinary.*23. *New Works and Buildings.*—The following works have been completed :—

Police barracks, Negombo, consisting of a main block containing accommodation for sergeant, single men, office, lock-up, and storeroom, and of subsidiary blocks containing accommodation for eight married men, with the necessary outbuildings. Cost Re. 0·17 per cubic foot.

Cooly lines—a set of six rooms on the 20th mile, Avisawella road, and on the 11th mile, Mugurugampola road.

New orderlies' stables and lines, Galle Buck. The buildings consist of two blocks : one providing accommodation for stabling twenty horses, quarters for twenty-four single men, bathroom, latrine, harness room, forage store, and office. Cost Re. 0·25 per cubic foot. The other quarters for two sergeants and six married men. Cost Rs. 0·23½ per cubic foot.

General magazine for storage of explosives, consisting of two magazines for the storage of dynamite, 63 ft. 6 in. by 35 ft.; small store, 23 ft. by 17 ft., for detonators, surrounded by a boundary wall. The larger magazines have been provided with an inspection passage between the walls of the magazine proper and the outer walls of the buildings. Cost Re. 0·43 per cubic foot.

Permanent wards, Leper Asylum, Hendala, consisting of a new ward providing accommodation for 36 beds, with the necessary outbuildings. Cost Re. 0·17½ per cubic foot.

House for head watcher, Ragama.

Dehiwala flood outlet.

Female ward, Lunatic Asylum. Cost Re. 0·34 per cubic foot.

The following works were not proceeded with by order of Government :—

Residence of Assistant Government Agent, Kalutara.

Public Works Office.

Technical College.

Accommodation for Fort police.

Infectious Diseases Hospital, Panadure.

Modara police station.

24. *Alterations and Additions to Buildings.*—The following works have been completed :—

Negombo jail—*infectious diseases ward.*

Negombo court-house—clerks' room.

Lighting Colonial Secretary's Office with electricity.

Building latrines and baths for European constables, Kew barracks.

Alterations and improvements to sergeants' quarters, Kew barracks

Drainage of Kew barracks.

Baths and latrines, Kew barracks.

Improvements to the store, Government Factory.

Improvements, Pilots' Tower.

Boundary wall, Galle Face cemetery.

Improvements, District Court, Colombo.

Improvements, Welikada magazine.

Additions to mail room, General Post Office.

The following works are in hand :—

Permanent roof over treadmill, Welikada.

Drainage, Welikada jail.

Temporary cadjan sheds, Civil Hospital, Colombo.

25. *Special Repairs to Buildings.*—The following works were completed :—

Kew barracks, Slave Island.

General Hospital, Colombo.

Stores and office, Maligakanda reservoir.

26. *New Roads.*—The approach road and fencing to the cemetery at Minuwangoda were completed, and good progress made with the construction of roads in Havelock park, Colombo.

27. *Additions and Improvements to Roads.*—The following works have been completed :—

Veyangoda to boundary of Province.

Jaela-Kotadeniyawa road.

Giriulla-Pasyala.

Grandpass to Negombo.

The following works have been in hand :—

Horana to Alutgama, consisting of metalling 6 miles, the construction of necessary embankments and bridges.

Pasyala to Attanagalla.

28. *New Bridges.*—The following works have been in hand :—

Dandugama bridge, consisting of three spans of 80 ft. on cast iron cylindrical piers and abutments. This bridge is open to traffic, and the approaches only remain to be completed. The bridge is of lattice girder type carrying an iron and concrete roadway 14 ft. in width.

Avisawella road bridges—bridges on this road have been reconstructed to permanent type : three spans of 10 ft. each on the 5th mile, one span of 12 ft. on the 6th mile, and one span of 29 ft. on 29th mile.

Wellampitiya bridge—ironwork completed and abutments in hand.

Hanwella-Bope road, 1st mile—ironwork completed ; erection in hand.

Bentota bridge—ironwork completed, central pier rebuilt, and erection of ironwork in hand.

29. *Repair of Bridges.*—The widening of Digarolla bridge and entire renewal of platform has been completed.

30. *Lands and Buildings to be acquired.*—The following quarries have been acquired:—
Colombo-Avisawella road, 10th mile.
Colombo-Galle road, 8th and 12th miles.

31. *Miscellaneous.*—The following works have been completed:—
Towpath, Hamilton canal, consisting of raising and widening the 1st mile of the eastern towpath, providing four new culverts, and repairing five.
Converting timber bridges into iron ones—five bridges have been converted in the Colombo District, sixteen in the Kalutara District, and two in the Negombo District.

CENTRAL PROVINCE.

Annually Recurrent Works.

32. *Maintenance of Roads.*—The Provincial Engineer reports that the roads have been kept in good order, and points out that the increased traffic on the railway during the last five years has thrown additional traffic on many of the roads.

The slip on 32nd mile of the Pundaluoya-Tawalantenna road continues to move and requires constant attention.

33. *Maintenance of Buildings.*—The buildings are in fair order throughout.

34. *Additions and Improvements to Buildings.*—Various minor additions and improvements to buildings have been effected, principally in the Kandy and Matale Districts.

35. *Repairs to Bridges.*—The bridges have been maintained in a fair state of repair.

36. *Miscellaneous Minor Works.*—Several minor works, mainly in connection with improvements to roads, have been carried out under this heading.

Public Works Extraordinary.

37. *New Works and Buildings.*—The following have been completed:—

Stabling, wood and straw sheds, Queen's Cottage, Nuwara Eliya.
Hospital, Dimbula, including administration block, five wards providing accommodation for 38 beds, operating room, observation ward, Medical Officer's quarters, Sisters' quarters, and attendants' quarters. The grounds comprise an area of $1\frac{1}{2}$ acre of land, and are surrounded by a wire fencing. The total cost of this project, including land and water supply, was Rs. 86,494.

Infectious Diseases Hospital, Nuwara Eliya, consisting of two wards, each providing accommodation for 6 beds, with the necessary outbuildings and fencing. Cost Rs. 11,307.

Dikoya Public Works Department bungalow. This work included the rebuilding of the residential portion of the bungalow consisting of 2 sitting-rooms, 3 bedrooms, enclosed verandahs, and stores. Cost Rs. 9,990, at the rate of $15\frac{1}{4}$ cents nearly per cubic foot.

Cooly lines and overseer's quarters on the 41st mile, Nanuoya-Nuwara Eliya road. Cooly lines 6 rooms and overseer's quarters consisting of 2 rooms.

At the Mahaiyawa cooly lines 12 rooms.
Dispensary at Madugoda, consisting of a dispensary, a living-room, bedroom, store, and necessary outbuildings. Cost Rs. 3,440.

Quarters for Sergeant-Major of Police, Nuwara Eliya, consisting of sitting-room, 2 bedrooms, verandahs, and the necessary outbuildings. Cost Rs. 4,851.

The following works are in progress:—

Clerk and Foreman's house, Hakgala.

Witness sheds, Police Court, Hatton.

Hospital, Maturata.

House of observation, Kandy.

Police station and barracks, Dimbula.

The sites for erecting police station and barracks, Agrapatana, and for the circuit bungalow, Lindula-Nuwara Eliya road, were not handed over to this Department during the year.

38. *Alterations and Additions to Buildings.*—The following works have been completed:—

Electric lighting the Pavilion, Kandy.

Improvements, clerks' residence, Kachcheri, Nuwara Eliya.

Boilers for cooking food for prisoners, Bogambara jail.

Medical aid hospital, Lindula.

Pussellawa hospital.

Uda Pussellawa hospital, including an infectious diseases hospital, providing accommodation for 30 beds.

Nawalapitiya hospital.

Police station, Hatton.

Powder magazine, Matale.

Post office, Kandy.

Post office, Nawalapitiya.

Post office, Maduklele.

39. *Special Repairs to Buildings.*—The following works have been completed:—

Medical aid hospital, Lindula.

Kandy Kachcheri—part renewal of gutters.

Police station, Nuwara Eliya—re-shingling roof.

Deltota hospital—rebuilding of stables and godowns.

Katugastota hospital—repairs to well.

40. *New Roads.*—The following work has been completed :—

Annfield road. The accounts of the cost of this road and also of the Padiapelella-Kabaragala road are not yet closed, owing to delay in the settlement of compensation for land.

The work on the Nugawela-Ulapane road was not commenced, the private contribution not having been paid into the Colonial Treasury.

41. *Additions and Improvements to Roads.*—The following works have been completed :—

Gampola-Pussellawa road culverts.

Katugastota-Madulkele road.

Haragama-Kurunduoya road.

Deltota road.

Kandapola-Uda Pussellawa road.

Kalawewa-Galawela road culverts.

Balakaduwa to junction of Trincomalee-Anuradhapura road.

The following works are in hand :—

Palapatwela-Galawela road—nearly completed.

Aladeniya-Iriyagama road—2 miles completed.

Kadugannawa-Alagalla road.

42. *New Bridges.*—The following works have been completed :—

Tammana-oya bridge of lattice girder type, iron and concrete, 50 ft. span, 12 ft. in width. Beligamuwa-Mirisgonioya road, 11th mile—iron and concrete bridge, 27 ft. span, 11 ft. 4 in. in width.

Galawela-Palapatwela road, 33rd mile—iron and concrete bridge, 15 ft. span, 11 ft. 4 in. in width.

The following works are in progress :—

Beligamuwa-Mirisgonioya road, 7th mile, bridge of lattice girder type, 50 ft. span, 12 ft. in width.

Talwatta-oya bridge, Galawela-Palapatwela road—iron and concrete bridge, 30 ft. span, 11 ft. 4 in. in width.

43. *Repairs to Bridges.*—The following works have been completed :—

Peradeniya satinwood bridge.

Nuwara Eliya-Lindula road—bridges on the 34th and 35th miles.

Gampola-Peradeniya road—bridges on the 5th and 8th miles.

44. *Lands and Buildings to be acquired.*—I regret to state that there appears to be considerable delay in handing over to this Department the lands necessary for public works and quarries in this Province.

45. *Miscellaneous.*—The following works have been completed :—

Water supply, Hakgala Gardens.

Improvements, Nuwara Eliya lake.

Sanitation of Kadugannawa.

Pundaluoya-Watagoda bridge.

Road to new sites, Nuwara Eliya.

Timber bridges on the road to the Government Civil Hospital and Public Works Department Stores, Nuwara Eliya, and at the junction between Dimbula and Uda Pussellawa road have been converted into iron and concrete structures.

NORTHERN PROVINCE.

Annually Recurrent Works.

46. *Maintenance of Roads.*—The Provincial Engineer reports that all the roads were generally maintained in good order. The increased expenditure on the road from Jaffna to Kaukesanturai satisfactorily met the increased wear and tear on this road owing to the transport of railway material, and it is anticipated there will be a material reduction in the cost of upkeep during 1902. Difficulty was experienced in obtaining limestone road metal at Elephant Pass, and a short section of the Iranamadu-Kokkavil road suffered towards the end of the year in consequence. The roads in the Vavuniya district were maintained in excellent condition, and reflect great credit on Mr. J. O. Ebert, District Engineer. An improvement has been effected in the condition of the roads in the Mannar District.

47. *Maintenance of Inland Navigation.*—The channels have been well maintained, and the system of transporting the silt to the reclamation in the vicinity of Jaffna continued.

48. *Repairs to Buildings.*—All the permanent buildings were maintained in a fair state of repair.

49. *Additions and Improvements to Buildings.*—The following works were completed :—

Magistrate's quarters, Point Pedro—minor improvements.

Vavuniya hospital—rebuilding ward No. 3.

Jaffna Fort—additions to parapet walls on the ramparts.

Assistant Government Agent's house, Mannar—addition of boarded ceilings.

Policè Magistrate's bungalow, Chavakachcheri—minor improvements.

Jaffna Jail—minor improvements.

Mantota hospital—erecting outbuildings to dispenser's quarters.

50. *Repairs to Bridges.*—The bridges have been maintained in fair order.51. *Miscellaneous.*—The following works have been completed under this heading :—

Bridge—12 feet span, permanent type—over drainage channel, Tellipalai.

Flood water channel, 1st mile, Mankulaim-Mullaittivu road.

The following work was in hand:—

Bridge on the Tellipali-Pandaterruppu road.

Public Works Extraordinary.

52. *New Works and Buildings.*—The following works have been completed:—
 Overseer's quarters on the 7th mile, Pessalai-Yakawewa Road. Cost Re. 0·16 per cubic foot.
 Cooly lines of 5 rooms in Vavuniya and of 6 rooms on the 136th mile, North-Central road, at a cost of Re. 0·17 and Re. 0·22 respectively.
 Quarters for an overseer at Kankarayam, at a cost of Re. 0·18 per cubic foot.
 General cemetery, Mullaittivu.
 Office for Provincial Registrar, Jaffna, at a cost of Re. 0·12 per cubic foot.

The erection of a post office at Mannar has been delayed owing to a change of site, and the erection of a hospital at Point Pedro has been abandoned by order of Government.

53. *Alterations and Additions to Buildings.*—The following works have been completed:—

Office Assistant's quarters, Jaffna—outbuildings and drains.
 Jaffna jail—ceiling cells.
 Fiscal's Office, Jaffna—enclosing verandah.
 District Engineer's house, Mannar—water tank, capacity 19,500 gallons. Cost Rs. 2,470.

54. *Special Repairs to Buildings.*—The following works have been completed:—

Temporary wards, Vavuniya.
 Medical Officer's quarters, Mullaittivu.

55. *New Roads.*—The following work has been completed so far as funds were available:—
 Maintai-Illupaikadai road, including gravelling 2 miles of the deviation, earthwork on the 2nd and 3rd miles, and the construction of a causeway on the 4th mile.

The Paranthan-Mullaittivu road works were stopped by order of Government.

56. *Additions and Improvements to Roads.*—The improvement works on 2 miles, viz., 4th and 5th miles, of the Mannar-Pessalai road were completed. The necessary repairs consisting of underpinning the side walls of the Punnalai causeway were completed.

57. *New Bridges.*—The bridge of 20 ft. span, permanent type, on the Paranthan embankment was completed. The construction of a bridge on the Jaffna-Point Pedro road is in hand.

58. *Repairs to Bridges.*—The necessary repairs to the bridge on Reclamation road, Jaffna, have been completed.

59. *Lands and Buildings to be acquired.*—The acquisition of a site for hospital, Point Pedro, was not proceeded with by order of Government.

60. *Miscellaneous.*—The following works were completed:—

Halting-places for carts on the North road, ten in number, 100 ft. in length and 20 ft. in width.
 Protecting sides of Mannar causeway.
 Repairs to Jaffna and Mannar Forts.
 Boring experiments, Jaffna. The result of these experiments, the Provincial Engineer reports, points to the probability of good water being obtained in large quantities within 4½ miles of Jaffna.
 Survey of road from Paranthan to Mullaittivu.

SOUTHERN PROVINCE.

Annually Recurrent Works.

61. *Maintenance of Roads.*—The Provincial Engineer reports that the roads in the Galle and Matara Districts have been maintained in excellent order. The principal roads in the Hambantota District have been maintained in good order, but the others have suffered on account of the scarcity of labour and extreme dryness of the climate.

62. *Repairs to Buildings.*—The permanent buildings have been maintained in good repair.

63. *Additions and Improvements to Buildings.*—The principal works carried out under this heading are:—

Improvements to Calf Vaccine Institute, Galle.
 Provision of two cells for lunatics and other improvements, Matara jail.
 Constructing bathing tank, Tangalla jail.
 Providing rails and fence and other improvements, Hambantota post office.
 Constructing lock-up, Hambantota police station.

64. *Repairs to Bridges.*—The usual repairs have been effected. Several of the timber bridges should be replaced by ones of a more permanent character.

65. *Miscellaneous.*—The principal works carried out under this heading were:—

Protecting Galle-Matara road, 86th mile, from the inroads of the sea.
 Construction of new culvert, Weligama railway approach road.
 Erecting crane, Hambantota jetty.

Public Works Extraordinary.

66. *New Works and Buildings.*—The following works have been completed:—

New cells, Galle jail.
 New Kachcheri, Hambantota.
 Cooly lines and overseer's quarters, Kottawa.

The following works are in hand :—

Hambantota jetty.

New court-house, Hambantota.

The erection of District Judge's house, Matara, was not proceeded with by order of Government.

67. *Alterations and Additions to Buildings.*—The following works have been completed :—

Alterations to old police station, Pettah, Galle.

Accommodation for Public Works Department, Galle.

68. *Special Repairs to Buildings.*—The repairs to Galle jetty have been completed.

69. *Additions and Improvements to Roads.*—The following works have been completed :—

Hikkaduwa to Gonapinuwela.

Protecting Galle-Matara road, 83rd and 86th miles.

The following works are in hand :—

Hambantota-Bundala road.

Tangalla road, between 126 $\frac{1}{2}$ and 129th mileposts.

Matara-Akurella road.

70. *New Bridges.*—The erection of five new bridges on the Galle-Udugama road is nearly completed, and the temporary bridge at Mahamodara has been completed. The ironwork for the Mahamodara and Gintota bridges is in hand.

71. *Repairs to Bridges.*—The reconstruction of the bridges Nos. 4 and 5 on the Hambantota road is in hand.

72. *Lands and Buildings to be acquired.*—Land for a cemetery at Weligama has been acquired. The acquisition of land for District Judge's quarters, Matara, has not been proceeded with by order of Government.

73. *Miscellaneous.*—The following works have been completed :—

Town survey, Hambantota.

Sea wall, Tangalla.

Sanitary improvements, Bentota.

Converting timber bridges into iron ones.

Bridges and culverts, Mamadola-Liyangahatota road.

EASTERN PROVINCE.

Annually Recurrent Works.

74. *Maintenance of Roads.*—The Provincial Engineer reports that, with the exception of the 85th and 86th miles of the Maduruoya-Eravur road and the 33rd mile of Karaitivu-Sammanturai road and the 44th mile of Akkaraipattu-Sagamam road, the whole of the roads were maintained in good order and condition. A great deal has been done towards re-shaping the roads and clearing of jungle and waterways during the year.

75. *Dredging Batticaloa Lake.*—During the year 1,635 cubes, or 6,605 tons, of material have been removed by the dredger at a cost of Re. 0.88 per cube, or Re. 0.22 per ton. The dredger was docked in October for general repairs.

76. *Repairs to Buildings.*—The permanent buildings were maintained in a good state of repair, except the apothecary's quarters at Muttur and the salt store at Nilaveli. A project for the reconstruction of the former is in course of preparation, and special provision has been made in the Supply Bill for 1902 for the necessary repairs to the roof of the latter.

77. *Alterations and Additions to Buildings.*—The following works have been carried out under this heading :—

Salt store, Akkaraipattu—re-roofing with Calicut tiles.

Government hospital, Trincomalee—fence and steps.

78. *Repair of Bridges.*—The usual repairs have been effected and the bridges maintained in good order, with the exception of the bridge at Urani, which is being replaced by a causeway and new iron bridge of a permanent type.

79. *Miscellaneous.*—Under this heading the following works have been carried out :—

Trincomalee—erecting tide gauge.

Chavalacadai—providing composite ferry boat.

Kilivetti—providing composite ferry boat.

Kivulakada wa—sinking well 30 ft. in depth.

Maduruoya-Eravur road—rebuilding abutments of bridge No. 21, 73rd mile.

Tillay-aar—providing canoe for ferry.

Karaitivu-Sammanturai road—constructing culvert, 28th mile.

Palamunai—acquiring land for metal quarry near 34 $\frac{1}{2}$ milepost, Coast road south.

Public Works Extraordinary.

80. *New Works and Buildings.*—The following works have been completed :—

District Judge's residence, Batticaloa. The buildings are of a permanent character.

Accommodation on ground floor: Drawing room 22 ft. by 17 ft., dining-room 20 ft. by 17 ft., office 17 ft. by 15 ft., store 11 ft. by 9 ft. 7 in. On upper floor: three bedrooms 23 ft. by 18 ft., 20 ft. 9 in. by 18 ft., and 15 ft. 5 in. by 18 ft., respectively; dressing-room 11 ft. 5 in. by 9 ft. 7 in.; and two bathrooms. The necessary outbuildings and stabling for two horses are also of a permanent character. Cost, including approach roads, fencing, drains, &c., was at the rate of 16 cents per cubic foot of building.

Cooly lines and overseer's quarters. Overseer's quarters have been erected near the 17th mile, Coast road north, Batticaloa; cost 11 cents per cubic foot. Cooly lines: 12 rooms have been erected near the 17th mile, Coast road north, Batticaloa; cost 12 cents per cubic foot.

Landing jetty, Kalkudah. The jetty is constructed of iron, with wooden joists and planking. The piles are of H iron section, 9 in. by 7 in., carried through the stratum of coral about 8 ft. into the sand; on these piles are fixed cast iron shoes, which rest on the coral bed; the bearing of the shoes being 6.25 square feet, distribute the load on the piles over the coral bed, which varies from 1 to 2 ft. in thickness. Substantial cross bracing, longitudinal wallings, rubbing pieces, and vertical fenders protected by iron angle pieces have been provided. The jetty is 165 ft. in length, and has a width of 28 ft., and is provided with the necessary landings. A portion, 122 ft. in length, is covered with corrugated iron roofing supported on iron principals carried by H iron standards 8 in. by 6 in. The depth of water at the end of the jetty is 8 ft. Cost, including crane seat, Rs. 37,744, or at the rate of Rs. 9 nearly per square foot of platform area.

Kantalai resthouse. This building, situated on the Dambulla-Trincomalee road, 25 miles from Trincomalee, is of a permanent character. Accommodation: hall 19 ft. by 16 ft., dining-room 19 ft. by 16 ft., three bedrooms 16 ft. by 13 ft., verandahs 10 ft. in width, carriage porch, and the necessary outbuildings, including stabling for four horses. The cost of the new buildings was at the rate of 17 cents per cubic foot, and that of the stables 6 cents per cubic foot. The materials from the old buildings were used as far as practicable.

Field hospital, Maha-oya. The temporary cadjan roof over the male ward referred to in my last Administration Report has been replaced by a tile roof.

Further proceeding with the erection of the Trincomalee jetty was delayed in accordance with the instructions of Government.

No site having been handed over to this Department for a residence for the Assistant Collector of Customs, the erection of this building was not proceeded with.

81. *Alterations and Additions to Buildings.*—The following works have been completed:—

Trincomalee jail. This work included the demolition and rebuilding of the male portion of the jail. The new buildings are of a permanent character, and consist of the following:—A block of five cells, each 9 ft. by 7 ft.; association ward 20 ft. by 9 ft., with verandah 6 ft. wide; kitchen 9 ft. by 8 ft.; workshop 14 ft. by 7 ft. 6 in.; office 10 ft. by 10 ft.

Trincomalee post office. This work consisted of the erection of quarters for two assistants. Accommodation: two rooms 14 ft. by 12 ft., kitchen 12 ft. by 10 ft., verandah 6 ft. wide on one side, and the necessary outbuildings. Cost 20 cents per cubic foot.

Covered way, Residency, Batticaloa. This work consisted of the erection of a covered way, 118 ft. in length, connecting the Residency with the visitors' quarters.

New salt store, Batticaloa. This work included the rebuilding of the west wall of the existing store, which had been badly cracked by piling salt up against it. Enclosing the verandah on the north side of the store.

Assistant Government Agent's house, Trincomalee. The work done under this heading consisted of providing polished cement floors in the above house.

82. *Special Repairs to Buildings.*—The special repairs to roof and floors of the Fiscal's Office, Batticaloa Kachcheri, were completed.

83. *New Roads.*—The following works have been completed:—

Road to Muttur ferry. This road commences on the 65th mile of the South Coast road, Trincomalee District, is 1.46 mile in length, and a continuation in a direct line of the Coast road from Batticaloa to Trincomalee; the distance from Batticaloa to its termination at Kottiyar is 67 miles. A jetty has been constructed on the banks of the Kottiyar to meet the convenience of traffic crossing the bay to and from Trincomalee. The jetty or quay wall is of cement concrete, 75 ft. in length, and built on a pile foundation 4 ft. below the bed of the river. A ramped concrete carriage way, 12 ft. in width, has also been constructed to afford easy passage of wheeled traffic to and from the ferry boats. The road is on embankment the whole way, and has a coral foundation surfaced with gravel. Provision for the passage of backwater has been made by the construction of a stone causeway. The cost of the works was at the rate of Rs. 11,232 per mile.

North Coast road to Toppur. This road, 1.61 mile in length, commences at the 60th mile of the Coast road in the Trincomalee District, passing through jungle across paddy fields to the village of Toppur, which is situated near Allai tank. The work included the construction of a bridge 1 span of 10 ft. and 5 spans of 15 ft., width of roadway 11 ft. 4 in., also bridges of 8-ft., 12-ft., and 6-ft. spans, and several masonry culverts carrying the road over irrigation channels. A masonry and concrete causeway providing for the passage of the flood water of the Peramboveli stream. Two 4-foot culverts have been provided in the causeway for the passage of irrigation water. Cost, including bridges and contingent works, was at the rate of Rs. 12,178 per mile. All the bridges are of a permanent type.

The extension of the South Coast road, Kalmunai District, was proceeded with.

84. *Additions and Improvements to Roads.*—The construction of a causeway on the 44th mile, Akkarai-pattu-Sagamam road, 200 ft. in length, to facilitate the passage of flood water, was completed. The causeway carries a road 16 ft. in width. The roadway is of cement concrete laid on a foundation of hand-packed rubble.

The following works have been proceeded with :—

Causeway, Periya Muhatuwaram. This causeway carries a roadway 660 ft. in length, 21 ft. in width, 3·5 ft. above mean sea level, and a further length of 794 ft., 20 ft. in width, 2·4 ft. above mean sea level; the length of the ramp is 100 ft., making a total length of 1,550 ft. The roadway is of cement concrete 9 in. thick laid on hand-packed rubble foundation 6 in. thick. Five bridged openings 10 ft. in width have been provided to admit of the passage of the dry weather flow. The north approach is graded 1 in 40 for a length of 282 ft.; the remaining portion, 308 ft. in length, is level. The south approach is graded 1 in 40 for a length of 265 ft., when it joins the South Coast road. The causeway was so far completed as to admit of the passage of wheeled traffic over it in December, and it is anticipated the approaches will shortly be completed.

Additional waterways, 66th mile, South Coast road. This project, consisting of the construction of two small bridges, is nearly completed.

The construction of the causeway on the 65th mile, South Coast road, has not been proceeded with, by order of Government.

85. *New Bridges.*—The following works have been in hand :—

Mohideentanda bridge. This project includes the construction of a causeway 324 ft. in length, carrying a roadway 16 ft. in width, at a level of 9·5 ft. above mean sea level. A bridged opening 5 ft. in width, sill level 3·5 ft. above mean sea level, is provided for the passage of dry weather flow. The roadway is of cement concrete 9 in. thick laid on a foundation of hand-packed rubble 6 in. thick. The upper and lower slopes of the causeway are protected with cement concrete on stone pitching.

Urani bridge and causeway. This project includes the construction of a bridge having a waterway of 90 ft. and a causeway 250 ft. in length on the 63rd mile of the South Coast road, Kalmunai District. The bridge consists of three spans of 30 ft., the abutments are of masonry, and the piers of rolled beams of H section, 12 in. by 6 in., crossed, braced, and erected on cement concrete foundations.

86. *Miscellaneous.*—The following works have been completed :—

Well and fence, Customs officers' quarters, and post office, Kalkudah.

Converting timber bridges into iron ones, Badulla-Batticaloa and Trincomalee-Kandy roads. Under this heading one span of 6 ft., four of 30 ft., one of 26 ft. 6 in., and one of 14 ft. 11 in. were converted, the width of roadway being 14 ft. 10 in.

Surveying and preparing plans, proposed Paddiruppu-Divulanai road.

Sinking wells, South Coast road, Kalmunai District. Under this heading three wells have been sunk at Sivalodai, 70 $\frac{1}{2}$ mile, south of Batticaloa; Peria Ragamavillu, 74 $\frac{1}{2}$ mile, south of Batticaloa; Seluwa Kalupuwa, 83rd mile, south of Batticaloa.

NORTH-WESTERN PROVINCE.

Annually Recurrent Works.

87. *Maintenance of Roads.*—The Provincial Engineer reports that the roads were generally maintained in good order.

The road from Padeniya to Siyambalagama is unable to satisfactorily withstand the heavy traffic on it, and unless the opening of the railway to Anuradhapura materially reduces the traffic on this road, a more substantial roadway than that at present existing will be required.

The portion of the Akkaraiapattu road between Palavi and Etalai is in indifferent order, being much cut up by the heavy traffic passing over it during the pilgrimage to St. Anna's Church.

The roads within the Local Board limits of Chilaw were handed over to the Local Board on the request of the Chairman by order of Government.

There is a marked improvement in the condition of the roads in the Dandugama district.

88. *Maintenance of Inland Navigation.*—The usual work of removing shoals and general maintenance has been carried out.

89. *Repairs to Buildings.*—The permanent buildings have been maintained in a good state of repair.

90. *Additions and Improvements to Buildings.*—The following works have been carried out under this heading :—

Maligawa, Kurunegala—improved water supply.

Nikaweratiya hospital—surface drainage.

Kurunegala hospital—cart shed and new pump.

Kalpitiya post office—addition of verandah.

Dandugama District Engineer's bungalow—surface drainage.

91. *Repair of Bridges.*—The bridges were maintained in good order, and the usual repairs carried out during the year.

Public Works Extraordinary.

92. *New Works and Buildings.*—The following works were completed :—

Marawila police station.

Cooly lines and overseer's quarters—cooly lines at Tonigala.

Land Registry Office, Kurunegala.

Public Works Department workshop, Chilaw.

The following are in hand :—

Powder magazine, Kurunegala.

Cooly lines and overseer's quarters, Kurunegala-Puttalam road, 14th mile.

Court-house, Puttalam.

District Engineer's quarters, Chilaw.

93. *New Roads.*—The road from the salt stores at Karativu to the ferry was completed.

Feeder Roads, Northern Railway.—The surveys of the road from (a) Villakatapotta to Hiripitiya via Gonawatta railway station, (b) Nikaweratiya to Polpitigama via Maho railway station, (c) Karawalagaswawa to Galgamuwa, and (d) Nikaweratiya to Andigama have been completed.

94. *Additions and Improvements to Roads.*—The following works were completed:—

Track metalling Puttalam-Battuluoya road to 14th mile.

Track metalling Toppu-Battuluoya road.

Toppu to Dankotuwa road.

North Coast road—widening causeway, 6th mile, over Mi-oya.

Coast road north of Puttalam—extension to Vanativillu.

95. *New Bridges.*—The following works have been completed:—

Pulichakulam bridge, Chilaw. This was carried out by the District Road Committee. Battulu-oya bridge. This bridge is of the lattice girder type with iron and concrete platform, and consists of four spans of 80 ft. The shore spans are carried on brickwork and concrete abutments, and the river spans on cast iron cylinders 6 ft. in diameter filled in with cement concrete, two cylinders forming each pier. The width of the roadway is 14 ft. The actual work on the site was commenced in March, 1900. The abutments having been erected, temporary staging was erected, suitable for carrying a 5-ton travelling crane to be used in sinking the cylinders, and afterwards in the erection of the ironwork. The cylinder sinking was commenced in October. The cylinders are founded in boulder clay, being sunk to depths varying from 14 ft. to 16 ft. The work, including approaches, which had been supervised by the District Engineer Mr. Churchill throughout, was satisfactorily completed at the close of the year.

Bridge over the Kudupitiya-oya. This work consisted of raising the bridge 3 ft. 8 in. Palavi bridge. Good progress has been made in the erection of the iron bridges over the Sengal-oya and Lunu-oya on the 58th and 54th miles of the Chilaw-Puttalam road. The former bridge consists of four and the latter of five spans of 30 ft. supported on rolled H iron piles fitted with shoes and bedded in concrete. The width of the roadway is 14 ft.

96. *Repairs to Bridges.*—The repairs to groynes at Deduru-oya bridge were completed, and fair progress made with the repair of the Palavi embankment and bridge.

97. *Miscellaneous.*—The following works were completed:—

Fence round District Judge's house, Kurunegala.

Three timber bridges on the Toppu-Battuluoya road, two on the Puttalam-Battuluoya road, and one on the Kurunegala-Giriulla road were replaced by bridges constructed of iron and concrete.

Culverts, Kompaspara road.

NORTH-CENTRAL PROVINCE.

Annually Recurrent Works.

98. *Maintenance of Roads.*—The Provincial Engineer reports that generally the roads have been maintained in fair order.

The road from Galkulam through Mihintale to Rambawa, upon the maintenance of which no expenditure was incurred during 1900 by orders of Government, was little better than a fair weather track during 1901; this track has been brought into a better condition with a view to its future maintenance as a gravelled road.

The road from Horawapotana towards Vavuniya requires more bridges as stated in my last annual report, and provision has been made in the Supply Bill for 1902 towards the cost of these works.

The road from Kala-oya to Galgodahena requires raising on portions of the 85th mile, and increased waterway for the discharge of flood waters from the Yan-oya.

The road from Mirisgona-oya to Galkandamadu over the last 10 miles has not been in a satisfactory condition. Increased provision for the maintenance of this road was made in the Supply Bill for 1901, but I regret that difficulties experienced with labour prevented full advantage being taken of the funds available.

The road from Mirisgona-oya to Kitulutu has been maintained in better order, and to some extent the additional provision made in the Supply Bill for 1901 has been utilized.

99. *Repairs to Buildings.*—The permanent buildings have been maintained in a satisfactory state of repair.

100. *Alterations and Additions to Buildings.*—Under this heading the following works have been completed:—

Certain minor alterations to the Kekirawa dispensary. The well has been sunk to a depth of 36 ft., but unfortunately the attempt to find water has not yet proved successful.

Addition of a store and latrine to the Anuradhapura Kachcheri.

Addition of sanitary accommodation to the Sinhalese clerk's house at Anuradhapura.

Erection of a brick wall, Anuradhapura jail.

Erection of a brick wall, Anuradhapura hospital.

101. *Repairs to Bridges.*—The bridges have been maintained in good order.

102. *Miscellaneous.*—Under this heading the following works have been completed:—

Survey of the Anuradhapura-Trincomalee road.

Removal of vegetable growth from the Miriswetiya and Abhagiriya Dagobas.

Repair of damage caused by a falling tree to the Provincial Engineer's Office, Anuradhapura.

Public Works Extraordinary.

103. *New Works and Buildings.*—The following works have been completed :—

One set of permanent cooly lines, six rooms, Anuradhapura. Cost at the rate of 25 cents per cubic foot.
 Quarters for Irrigation Clerk, Kachcheri. Cost at the rate of 28 cents per cubic foot.
 Powder-magazine, Mihintale. Cost at the rate of 39 cents per cubic foot.
 Medical Officer's quarters, Mihintale. Cost at the rate of 25 cents per cubic foot.

The following works are in hand and nearly completed :—

Quarters for Sinhalese clerk, Anuradhapura.
 Archæological Commissioner's house, Anuradhapura.
 One set of permanent cooly lines at Alut-oya.
 New court-house, Anuradhapura.

The erection of new residence for Medical Officer, nurses, and dispensary at Anuradhapura was stopped by order of Government.

104. *Alterations and Additions to Buildings.*—The following works have been completed :—

Additions and alterations, Anuradhapura jail, consisting of raising the walls, roofing cells with iron and concrete, and improving the drainage.
 Archæological Commissioner's house, Anuradhapura, consisting of constructing road, sinking well; erecting fence and gate.

The following work is in hand :—

Improvements to Kachcheri.

105. *New Roads.*—Fair progress has been made with the construction of the Habarana-Topawewa road, some delay being caused in the difficulty of obtaining masons for the construction of culverts at Topawewa.

No expenditure has been incurred upon the construction of Northern Railway feeder roads.

106. *Additions and Improvements to Roads.*—The following works are in hand :—

Mirisgoni-oya to Galkandamadu road.
 Maradankadawela-Habarana road.
 Habarana-Topawewa road.
 Anuradhapura-Puttalam road.
 Anuradhapura-Kurunegala road.

107. *New Bridges.*—Only one of the three bridges on the Kalaoya-Galgodahena road has been completed owing to the difficulty of obtaining masons.

108. *Miscellaneous.*—The following works have been completed :—

Metalling road reservation, Anuradhapura.
 Converting timber bridges into iron ones on the Habarana-Topawewa and Anuradhapura-Trincomalee roads.
 Roadside drains, Madawachchiya.
 Gal-oya well.
 Survey of approach road to proposed railway station, Anuradhapura.

PROVINCE OF UVA.

Annually Recurrent Works.

109. *Maintenence of Roads.*—The Provincial Engineer reports that the whole of the roads, except a portion of the Koslanda-Poonagala gravel road and a portion of the Wellawaya-Tanamalwila road, have been maintained in a satisfactory state of repair.

Considerable progress has been made with the rooting out of jungle on the sides of the road, resulting in the encouragement of the growth of grass, tending to prevent the erosion of the banks and sides of the road, and the consequent silting up of the side drains.

110. *Repairs to Buildings.*—The permanent buildings have been maintained in a satisfactory state of repair.

111. *Alterations and Additions to Buildings.*—Under this heading the following alterations and additions have been completed :—

Haputale post office—improvement of the sanitary condition by cutting back the high ground near the building.
 Bandarawela post office—concrete floors and ceilings to bedrooms.
 Badulla police station—skylights to cells.
 Badulla hospital—addition of clothes room.
 Haputale hospital—addition of clothes room, addition of latrine to, and improved lighting of, Medical Officer's quarters.
 Lunugala hospital—addition of clothes room.

112. *Repairs to Bridges.*—The bridges have been maintained in good order.

113. *Miscellaneous.*—The following works under this heading have been completed :—

Rebuilding retaining wall at Haputale.
 Survey of proposed road, Haputale to Dambatenna.
 Acquisition of land, Bandarawela water supply.
 Survey of Badulla-Spring Valley bridle road deviation.

The following work is in progress :—

Kiralunaremade irrigation aqueduct.

*Public Works Extraordinary.*114. *New Works and Buildings.*—The following works have been completed :—

New police station, Bandarawela. Cost at the rate of $17\frac{1}{2}$ cents per cubic foot.
Cooly lines and overseer's quarters, Badulla-Haputale road. Cost at the rate of $18\frac{1}{4}$ cents per cubic foot.

The following works are in progress :—

New court-house, Bandarawela.
Permanent ward, Medagama hospital.
Cooly lines, Passara-Namunakuli road.

115. *Alterations and Additions to Buildings.*—Stables for Superintendent of Surveys have been erected. Cost at the rate of 20 cents per cubic foot.

116. *New Roads.*—The construction of the Bibile-Medagama road has made fair progress. This road, commencing at Bibile on the Badulla-Batticaloa road, passes through Medagama to Obbekota on the Muppane-Pottuvil road. The first 5 miles having been previously constructed, the road is now nearly completed for $7\frac{1}{2}$ miles. I regret to note that the Provincial Engineer reports the prevalence of fever and dysentery amongst the labour force employed on this work.

The construction of the road from Bibile to Alutnawara was not proceeded with by order of Government.

117. *Additions and Improvements to Roads.*—The following works have been completed :—

Improvement, second section of the Koslanda-Poonagala road.
Improvement, Badulla-Taldena road.
Metalling Wellawaya-Tanamalwila road.
Passara-Muppane road, diversion.

The improvement of the Muppane-Pottuvil road, including the grading of the approaches to streams, construction of culverts, and formation of road, has been proceeded with.

118. *New Bridges.*—The construction of the horse bridge over the Kumbukkan-oya at Nakkala has been proceeded with. The abutments and approaches are completed, and the ironwork has been delivered.119. *Miscellaneous.*—The following works have been completed :—

Halting-places for carts, Passara-Madulsima road.
Survey for Bandarawela water supply.
Conversion of timber bridges into iron ones—one on the Dikwella-Madulla road, one on the Kumbukkan-oya, one on the Kumbalwela-Passara road, four on the Bibile-Medagama road, eight on the Bibile-Alutnawara road, and one on the Wellawaya-Pottuvil road.
The protection of the Panewwa springs, Bandarawela.

PROVINCE OF SABARAGAMUWA.

*Annually Recurrent Works.*120. *Maintenance of Roads.*—The Provincial Engineer reports that the roads throughout the Province have been maintained in good order.121. *Repairs to Buildings.*—The permanent buildings have been maintained in good order.122. *Additions and Improvements to Buildings.*—The following works have been completed :—

Police barracks, Ratnapura—drainage and latrine accommodation.
Shades, Provincial Engineer's residence.
Ratnapura jail—provision of metal shoot.
Rakwana Police Court—latrine.
Kegalla court-house—witness shed.
Avisawella District Engineer's quarters—drainage and verandah.
Rakwana police station—drainage.
Karawanella Medical Officer's quarters—lightning conductor.
Karawanella—re-roofing infectious hospital.
Balangoda hospital—providing pump.
Godakawela hospital—conversion of store into ward.
Kolonna hospital—improvement of approach road.

123. *Repairs to Bridges.*—The bridges have been maintained in a good state of repair.124. *Miscellaneous.*—The following works have been completed :—

Morawaka-Rakwana road—repairs of flood damage.
Ardross-Polatagama road—survey of.
Nambapana road—acquisition of metal quarry.
Balangoda-Chetnole road—survey of.
Kandy road—rebuilding parapet wall on 50th mile.

*Public Works Extraordinary.*125. *New Works and Buildings.*—The following works have been completed :—

New Land Registry Office, Kegalla, consisting of record-room 50 ft. by 25 ft., clerks' room 50 ft. by 25 ft., Registrar's office 25 ft. by 15 ft., tiffin room 18 ft. by 7 ft., and the necessary outbuildings. Cost Re. 0.17 per cubic foot.
New dispensary, Embilipitiya, consisting of dispensary 12 ft. by 12 ft., consulting room 12 ft. by 7 ft., dining-room 12 ft. by 12 ft., two bedrooms 10 ft. by 10 ft. and 12 ft. by 7 ft., and necessary outbuildings. Cost Re. 0.26 per cubic foot.
Permanent cooly lines, Hambantota road—seven rooms 10 ft. by 10 ft. Cost Re. 0.21 per cubic foot.

Overseer's quarters, Madampe-Hambantota road—two rooms 12 ft. by 12 ft., shed 20 ft. by 12 ft. Cost Re. 0·17 per cubic foot.

Bulatweleniya bungalow, consisting of three rooms 15 ft. by 14 ft., coach-house, stabling for two horses, and necessary outbuildings. Cost Re. 0·21 per cubic foot.

Quarters for District Engineer's clerk, Avisawella, consisting of three rooms 14 ft. by 14 ft. and necessary outbuildings. Cost Re. 0·25 per cubic foot.

Dispenser's quarters, Balangoda hospital, consisting of two rooms 14 ft. by 12 ft., store 8 ft. by 7 ft., and necessary outbuildings. Cost Re. 0·30 per cubic foot.

Nurses' quarters, Balangoda hospital, consisting of two rooms 12 ft. by 12 ft., one room 15 ft. by 12 ft., and necessary outbuildings. Cost Re. 0·22 per cubic foot.

The following works are in hand :—

New post and telegraph office, Rakwana.

Permanent ward, Kegalla hospital, 24 beds.

Permanent ward, Karawanella hospital, 20 beds.

Cooly lines, Avisawella district.

The erection of a post and telegraph office, Kegalla, was not proceeded with by order of Government.

126. *Alterations and Additions to Buildings.*—The following works have been completed :—

Improvement, Ratnapura post office.

Avisawella hospital extension, consisting of male ward, 12 beds, 50 ft. by 22 ft.; female ward, 8 beds, 34 ft. by 22 ft.; office, 18 ft. by 12 ft.; store, 18 ft. by 12 ft., with necessary covered ways and outbuildings. Cost per bed male ward Rs. 1,000, female ward Rs. 1,100. Cost Re. 0·17½ per cubic foot.

Nurses' quarters—three rooms 12 ft. by 12 ft., stores 12 ft. by 8 ft., outbuildings, and covered way. Cost Rs. 0·25 per cubic foot.

District Medical Officer's quarters—two rooms 12 ft. by 12 ft., storeroom 12 ft. by 12 ft., with necessary outbuildings. Cost Rs. 0·26½ per cubic foot.

Provincial Registrar's Office, Ratnapura—additional accommodation.

Two cells for lunatics, Ratnapura jail.

Additions to Ratnapura Kachcheri.

127. *Special Repairs to Buildings.*—The following works have been completed :—

Repairs to Medical Officer's quarters, Kegalla.

Repairs to District Judge's house, Ratnapura.

Repairs to Kachcheri, Kegalla.

128. *New Roads.*—The Madampe-Hambantota road is now completed and opened for traffic to the 100th mile, viz., 24 miles from Madampe, leaving 13 miles and 2 lines to complete it to Liyan-gahatota. The expenditure during 1900 and 1901 has been Rs. 33,000, for which 4·75 miles of road, including one bridge of 20 ft. span, one of 30 ft. span, two of 10 ft. span, and one of 8 ft. span, carrying a roadway 11 ft. 4 in. in width, have been constructed. The bridges are of a permanent type.

A sum of Rs. 8,450 was by special resolution of Council paid to Messrs. Finlay, Muir & Co. in respect of the construction of 4½ miles of the Ratnapura-Malwela road, which road has been taken over by Government and placed in charge of this Department.

Good progress has been made with the construction of the Polatagama-Ardross road.

129. *Additions and Improvements to Roads.*—The improvements of the Ruanwella-Veyangoda road have been completed.

I regret to have to report that the unfavourable weather prevented permanent work being done on the Algoa causeway.

130. *New Bridges.*—The following works have been completed :—

Rebuilding bridge on the 2nd mile, Ratnapura-Nambapana road. The bridge is 30 ft. span to type, carrying 11 ft. 4 in. roadway. Abutments of H iron piles on concrete bed with pitched slopes. Cost Rs. 263 per foot run.

Morali-oya bridge, Veyangoda-Ruanwella road. This bridge consists of three spans of 18 ft. with 10 ft. roadway to type. The platform and roadway were converted from timber to iron and concrete. Cost Rs. 90 per foot run.

Mahaoya-ela bridge. Span 50 ft. on masonry abutments. The bridge is of the lattice girder type, carrying a roadway 12 ft. in width. The foundations involved heavy expenditure. Cost Rs. 692 per foot run.

Hulanda-oya bridge. Span 80 ft. on masonry abutments, carrying a roadway 10 ft. in width to type. Cost Rs. 250 per foot run.

The rebuilding of the bridge on the 95th mile, Ratnapura road, consisting of one span of 42 ft., carrying a roadway 10 ft. in width.

131. *Repairs to Bridges.*—The following works have been completed :—

Bridge at 70½ mile, Pelmadulla-Gilgarron road. Span 16 ft., width of roadway 11 ft. 4 in., type design on masonry abutments. Cost Rs. 176 per foot run.

Re-planking eight bridges in the Kegalla District. The following bridges were entirely re-planked at a cost of Rs. 14 per foot run :—

Kegalla-Bulatkohopitiya Road.

1st mile, 39 ft. in length
3rd do. 30 ft. do.
7th do. 106 ft. do.

Kandy Road.

59th mile, 69 ft. in length

Rebuilding abutments, Halpe road, 89th mile.

Polgahawela Road.

1st mile, 54 ft. in length
2nd do. 390 ft. do.
4th do. 27 ft. do.
7th do. 80 ft. do.

132. *Lands and Buildings to be acquired.*—The site for the Rakwana post office, 30 poles in area, was acquired at a cost of Rs. 250.

133. *Miscellaneous.*—The following works have been completed:—

Drainage, Rambukkana, consisting of 1,005 lineal feet of open masonry drains, at a cost of Rs. 3.28 per lineal foot.

Piling and filling in side of road, 18 $\frac{1}{4}$ mile, Rambukkana-Dolosbage road.

The following timber bridges were converted into iron ones:—

Pelmadulla-Gilgarron road. Two bridges of 12 and 22 ft. span, carrying a roadway 11 ft. 4 in. in width to type, on the 75th and 76th miles respectively.

Horse bridge, 14 ft. span, 4 ft. in width, Rakwana-Morawaka bridle road.

Veyangoda-Ruanwella road—

15th mile, span 7 ft., width of roadway 12 ft. 0 in.
16th do. 9 ft., do. 11 ft. 4 in.
17th do. 19 ft., do. 11 ft. 4 in.
17th do. 9 ft., do. 11 ft. 4 in.
18th do. 7 ft., do. 12 ft. 0 in.
19th do. 10 ft. 6 in. do. 11 ft. 4 in.

Cost Rs. 43 per foot run.

Rambukkana-Dolosbage road, 1st mile, span 10 feet, width of roadway 11 ft. 4 in. Cost Rs. 58 per foot run.

Surveys and reports have been forwarded to Government on the proposed Polatagama-Ardross road.

Proposed causeway over the Maha-oya at Andramadu on the main road from Kegalla.

Road from Ratnapura to Kalawana.

Ratnapura-Malwela ferry road.

Ellearawa-Pinnawella road.

WORKS CHARGEABLE TO LOANS AND OTHER FUNDS.

134. *Customs Premises.*—Considerable progress has been made in carrying out the works asked for by the Chamber of Commerce in the report of the Sub-Committee of that Chamber dated 26th April, 1900:—

The building of a quay wall in front of the old grain sheds J and K is in hand.

The construction of two jetties on the north-east face of the sea wall is practically completed.

The ironwork for the erection of a light open shed to shelter goods landed adjacent to I warehouse is completed.

Another iron shed adjoining I warehouse of the same length and width has been completed. Commissariat street has been included in the Customs premises, and the road nearly completed round by G and H warehouses.

The ironwork has been completed for covering in the roadway on the sea front of the export warehouses B, C, and D, and erection is in hand.

The lengthening of the two jetties at Kochchikada has practically been completed.

One-half of the roadway leading to the warehouses at Kochchikada has been paved with Jarrah timber blocks laid on concrete.

Plans and estimate have been prepared and submitted for the reconstruction of the Master Attendant's jetty.

Orders have been placed for the supply of electric cranes for use in the Customs premises. The work of widening Seashore street is in hand.

135. *Camps for Prisoners of War.*—The maintenance and additions required from time to time at the camps have been duly attended to.

136. *Cooly Camps, Ragama.*—The erection of a new camp similar to camp No. 5 is in hand.

137. *Minor Courts, Hulftsdorp.*—The erection of these buildings has made substantial progress, and it is anticipated they will shortly be ready for occupation.

138. *Sengaladi Resthouse.*—The resthouse at Sengaladi, built by this Department under the supervision of the Provincial Engineer, Eastern Province, for the Provincial Road Committee, has been completed.

GOVERNMENT FACTORY.

139. This branch of the Department was under the immediate supervision of Mr. G. H. M. Hyde until the return of Mr. E. C. Davies on the 6th October, when Mr. Hyde reverted to the duties of his substantive appointment of Mechanical Engineer, having carried out the duties of Factory Engineer for a period of eighteen months with zeal and efficiency.

The staff at the Government Factory has been increased by the addition of a Superintendent of Works, the Government having decided that in future all work in connection with electrical installations in Government buildings and premises should be carried out by this Department. Mr. Rylands was appointed Superintendent of Works on the 1st June, 1901.

Particulars of work done during the year will be found in the Factory Engineer's report annexed, from which it will be seen that works of bridge construction and harbour improvements account for more than one-half of the total expenditure.

In Appendix 5 will be found the particulars of the several bridges constructed at the Factory during the year; in Appendix 6 a statement of the distribution of Factory Expenditure under the several classifications for the years 1900 and 1901; and in Appendix 7 the classification of expenditure on the several classes of work during the years 1898 to 1901, inclusive.

COLOMBO WATERWORKS.

140. *Labugama Reservoir*.—The rainfall registered at Labugama during the year amounted to 145.17 in., rain falling on 228 days. The maximum rainfall during twenty-four hours occurred on the 28th October, when 6.70 in. were registered. The water in the reservoir was 1 ft. 2 $\frac{1}{4}$ in. below overflow level on the 27th February; the sluices were opened and the water rose in the reservoir, attaining a maximum height of 1 ft. 4 in. above overflow level. The maximum depth from which water supplied to the town was drawn from the reservoir was 11 ft. below overflow level, the lowest water level reached being 3 ft. 7 in. on the 1st July.

The reservoir and works in immediate connection therewith have been satisfactorily maintained.

141. *Main Pipe Line*.—The pipe line has been satisfactorily maintained, a constant flow being obtained throughout the year. The few leaks which occurred were in the portion duplicated, and were repaired without the flow of water to Colombo being stopped.

142. *Maligakanda Service Reservoir*.—This reservoir has been maintained in a satisfactory state of repair without any exceptional expenditure.

143. *Distribution Works*.—The distribution works were maintained in a satisfactory state of repair. During the year four new standposts or street fountains were fixed and four were removed, the total number in use being 691. 136 new services for domestic supply were constructed, making a total number of 3,071. 53 meters were fixed to services for other than domestic purposes. 28 meters were removed, making a total of 206 in use. 1,269 yards of 3-in. pipe for extended services were laid during the year.

144. *Consumption of Water*.—In Appendix 8 will be found a tabular statement of the consumption of water during each month in the year. In Appendix 9 will be found a monthly return of water supplied by meter in each ward during the year.

It will be seen that throughout the year, with the exception of January, the maximum daily consumption each month exceeded the maximum discharging capacity of the Labugama main, viz., 2,900,000 gallons per diem, necessitating the water being shut off from 8 P.M. to 4 A.M. during the following periods:—

April 1 to 8

August 1 to 31

September 1 to 30

October 1 to 28

December 15 to 28

The average consumption of water per head per diem, taking the population at 150,000, was for all purposes at the rate of 18.5 gallons; deducting the metered supplies reduces the rate to 15.5 gallons.

145. *Quality of Water*.—The results of the monthly analyses available will be found in Appendix 10.

146. Mr. J. Campbell retired on the 17th May last after eighteen years of service. On his retirement the Department lost the services of a very capable and valued officer.

147. The following tabular statement showing the consumption of water during the last six years is of interest:—

Year	Water supplied by Meter.	Total Consumption.		Maximum Daily Consumption.
		Gallons.	Gallons.	
1896	...	38,097,840	...	2,555,508
1897	...	51,353,450	...	2,502,300
1898	...	82,941,553	...	2,646,241
1899	...	105,569,529	...	2,869,581
1900	...	129,933,208	...	3,997,067
1901	...	162,997,699	...	3,149,578

The great increase in the quantity of water supplied by meter, that is, mainly to shipping and premises used for other than domestic purposes, will be noted: in 1896 it amounted to, say, 5 per cent., in 1901 it amounted to 16 per cent. of the total supply.

148. It is satisfactory to be able to record that apparently the carrying out of the extension of the waterworks to meet the present and increasing demand for water, urged in my special report No. 875, dated 6th April, 1899, Sessional Paper No. XIX. of 1901, is not likely to be much longer delayed.

STAFF.

149. Mr. E. Venning, Provincial Engineer, Southern Province, retired in June after a service of thirty years. By the death of Mr. C. Arunachalam, District Engineer, Passara, on the 19th February, the Department lost an efficient and zealous officer. Messrs. W. A. L. Rowland and B. K. Adams, District Engineers, left the Department in February and May, respectively, having resigned their appointments under Government.

Mr. D. M. Settinayake, Mudaliyar, Clerk, died on the 17th July, and a passed candidate was appointed to succeed him; Mr. K. Chipnatamby, Clerk, was transferred to the Anuradhapura Kachcheri in August, being succeeded by Mr. J. E. Philips from that office.

150. The following officers have been on leave during the year:—

Name.	Commencement of Leave.	Period.	Returned to Duty.
Mr. A. W. Taffs	... June 25, 1900	... 11 months and 27 days	... June 22, 1901
" A. Clement Smith	... February 1, 1900	... 1 year and 17 days	... February 18, 1901
" A. de Courcy Carson	... February 1, 1900	... 1 year, 6 months, and 24 days	... August 25, 1901
" E. C. Davies	... April 6, 1900	... 1 year and 6 months	... October 6, 1901
" T. H. Chapman	... September 5, 1900	... 11 months and 21 days	... August 26, 1901
" T. R. Ward	... November 10, 1900	... 11 months and 25 days	... November 5, 1901
" R. W. Smith	... December 6, 1900	... 5 months and 19 days	... May 25, 1901
" A. H. Nathanielsz	... January 8, 1901	... 1 year and 5 months	... Absent
" H. Bucknall	... March 21, 1901	... 8 months and 18 days	... December 9, 1901
" A. E. Mayes	... May 1, 1901	... 1 year	... Absent
" R. G. Carte	... June 4, 1901	... 1 year and 6 months	... do.
" A. Stanley Colls	... June 6, 1901	... 5 months and 20 days	... November 26, 1901
" W. B. Gregson	... June 16, 1901	... 1 year	... Absent
" E. G. Eves	... August 4, 1901	... 5 months and 24 days	... do.
" T. S. Edge	... September 10, 1901	... 8 months and 14 days	... do.
" H. E. H. Hayes	... October 4, 1901	... 5 months and 7 days	... do.

151. The vacancies in the Engineering Branch referred to in my last Administration Report were filled up during the year by the appointment of four new officers from England, who arrived in the Colony as follows:—Mr. A. P. Brohier in January, Mr. J. F. Fitzsimons in March, Mr. J. A. Moraes in April, and Mr. A. Rothwell in October.

The following officers on service in the Irrigation Department have been appointed District Engineers in this Department:—Mr. E. G. Eves in January, Mr. E. W. Cade in June, and Mr. S. H. Bower in August.

Messrs. A. Clementi Smith and A. de Courcy Carson, who left with the Ceylon Contingent for South Africa, and subsequently proceeded to England on leave, returned, the former in February and the latter in August. Consequent on their return Mr. L. P. Emerson, who had been temporarily engaged, left the Department in December and joined the Irrigation Department.

Messrs. F. H. Bartholomeusz and A. de Livera also left the Department, the former in August and the latter in December, having accepted appointments under the Colombo Municipality. At the close of the year six engineers were on leave.

152. The changes that have taken place during the year in the provincial offices are as follows:—

Western Province.—Mr. H. B. Christie relieved Mr. H. A. Grant as Provincial Engineer in March, and in the same month Mr. H. Bucknall, District Engineer, Negombo, proceeded on leave, being succeeded by Mr. A. Clementi Smith; Mr. E. G. Eves assumed duties as District Engineer, Colombo, in April, relieving Mr. A. E. Mayes, who left on leave; Mr. A. W. Taffs returned from leave in June and resumed duties as District Engineer in charge of Buildings, Colombo; Mr. F. Ludovici, District Engineer, Ragama, was transferred to Kegalla in June, being succeeded by Mr. J. A. Moraes; Mr. E. G. Eves proceeded on leave in August, being relieved by Mr. A. de Livera; Mr. T. R. Ward returned from leave in November and assumed duties as District Engineer, Colombo, relieving Mr. A. de Livera, who was seconded for service under the Municipal Council, Colombo, with effect from the 2nd December; Mr. S. F. Johnpulle, District Engineer's Clerk, Negombo, was transferred to Kandy in June, being succeeded by Mr. S. Chelliah; Mr. V. A. Loos, Clerk to the Assistant Engineer, and Mr. M. Aaron, District Engineer's Clerk, Colombo, were transferred in January, the former to Passara and the latter to Puttalam, being succeeded by Messrs. C. M. Chellappa and S. Nagalingam; Mr. A. Tambiah, Second Clerk, retired in April owing to ill-health, being succeeded by Mr. Paul Francis from Ratnapura.

153. *Central Province.*—Mr. A. Stanley Colls, District Engineer, Nuwara Eliya, proceeded on leave in June, being succeeded by Mr. R. W. Smith. On Mr. Colls' return on the 30th November he resumed duties at Nuwara Eliya, and Mr. R. W. Smith proceeded to Kurunegala to resume his work in connection with the water supply to that town. Mr. J. G. Weinman, Inspector, who was on six months' leave, died on the 13th August, and Mr. A. H. Auwardt, District Engineer, retired in September on being condemned by a Medical Board as unfit for service; Mr. A. Cathiravalupillai, Head Clerk, was transferred to Batticaloa in February, being succeeded by Mr. Poopalapillai from Kurunegala; Mr. C. V. Theuring was transferred to the District Court, Colombo, in June, Mr. S. F. Johnpulle succeeding him; Mr. N. M. Rasaratnam was appointed to succeed Mr. S. Chelliah, who was transferred to Negombo.

154. *Northern Province.*—Mr. C. H. de Silva, District Engineer, Pallai, was transferred to Puttalam in May, being succeeded by Mr. A. P. Brohier; Mr. K. Kanthavanampillai, District Engineer's Clerk, Mannar, was condemned by a Medical Board as unfit for service and retired in September; Mr. K. Navaratnam was appointed to succeed him.

155. *Southern Province.*—Mr. H. A. Grant assumed duties as Provincial Engineer, Southern Province, in March, relieving Mr. E. Venning, who went on three months' leave preparatory to retirement; Mr. E. S. de Silva, District Engineer, Hambantota, was transferred to Galle in October, Mr. J. Jeffery succeeding him at Hambantota; Mr. H. Bucknall, who returned from leave on the 9th December, relieved Mr. Jeffery at Hambantota, and the latter resumed duties at Galle on the 30th December, relieving Mr. E. S. de Silva, who was appointed District Engineer, Ragama.

156. *Eastern Province.*—Mr. R. G. Carte, District Engineer, Trincomalee, proceeded on leave in May, and was succeeded by Mr. E. H. Vanderstraaten; Mr. J. F. Fitzsimons performed the duties of District Engineer, Batticaloa, till September, when he was relieved by Mr. A. de Courcy Carson; Mr. Fitzsimons was appointed to Kurunegala in October as District Engineer; Mr. S. H. Bower, who was transferred from the Irrigation Department in August, was attached to the Provincial Engineer's Office, Batticaloa, till December, when he was appointed District Engineer, Maradankadawela; Mr. A. Sanmugam, Head Clerk, was transferred to Kurunegala in January, being succeeded by Mr. A. Cathiravalupillai from Kandy; Mr. S. W. V. Arumogam, District Engineer's Clerk, Batticaloa, and Mr. G. Sivapragasam, District Engineer's Clerk, Kalmunai, were also transferred, the former to Koslanda and the latter to Ratnapura, being succeeded by Messrs. S. Swaminather and C. Chithamparapillai; Mr. G. F. Buultjens, Inspector, was transferred for duty in the Eastern Province in February.

157. *North-Western Province.*—Mr. B. K. Adams, District Engineer, Puttalam, resigned his appointment under Government in May and was succeeded by Mr. C. H. de Silva; Mr. H. E. H. Hayes, Provincial Engineer, proceeded on leave in October, and was succeeded by Mr. R. W. Crabbe; Mr. J. F. Fitzsimons from Batticaloa succeeding Mr. Crabbe as District Engineer, Kurunegala; Mr. S. Poopalapillai, Head Clerk, was transferred to Kandy, being succeeded by Mr. A. Sanmugam from Batticaloa; Mr. S. Nagalingam, District Engineer's Clerk at Puttalam, was transferred to Colombo in January, being succeeded by Mr. M. Aaron; Mr. P. Valayuthenpillai, Draughtsman, left for Ratnapura in June, being relieved by Mr. C. E. Anthony.

158. *North-Central Province.*—Head Overseer Mr. Ondatjie was transferred to the Southern Province in February; Mr. L. P. Emerson, District Engineer, Maradankadawela, left the district in December, having obtained an appointment in the Irrigation Department, and was succeeded by Mr. S. H. Bower.

159. *Province of Uva.*—Mr. C. Arunachalam, District Engineer, Passara, died on the 19th February, and Mr. Head Overseer Black carried on the duties of District Engineer until Mr. A. P. Brohier relieved him on the 2nd March. On the 3rd June Mr. Brohier was transferred to Pallai, and

was relieved by Mr. E. W. Cade ; Mr. T. S. Edge, District Engineer, Koslanda, proceeded on leave in September, and was succeeded by Mr. T. H. Chapman ; Mr. S. Swaminather, District Engineer's Clerk at Passara, and Mr. C. M. Chellappa, District Engineer's Clerk at Koslanda, were transferred in January, the former to Batticaloa and the latter to Colombo, being succeeded by Messrs. V. A. Loos and S. W. V. Arumogam. In July Mr. V. A. Loos was transferred to the Technical College, being relieved by Mr. S. Solomons from the Head Office.

160. *Province of Sabaragamuwa.*—Mr. H. B. Christie, Provincial Engineer, was transferred to Colombo in February, and was succeeded by Mr. P. M. Bingham, Mr. A. N. Robertson, who was attached to the Provincial Engineer's Office, succeeding Mr. Bingham as District Engineer, Ratnapura ; Mr. W. B. Gregson, District Engineer, Kegalla, proceeded on leave in June, and was succeeded by Mr. F. Ludovici ; Mr. C. Chithamparapillai, District Engineer's Clerk, Ratnapura, was transferred in February to Kalmunai, being succeeded by Mr. G. Sivapragasam ; Mr. Paul Francis, Second Clerk, was removed to Colombo in June, Mr. J. P. Cherubim being appointed to succeed him ; Mr. C. E. Anthony, Draughtsman, was transferred to the Provincial Engineer's Office, Kurunegala, being succeeded by Mr. P. Valayuthempillai from that office.

GENERAL.

161. The following tabular statement shows the expenditure on Annually Recurrent Works, Extraordinary Public Works, and those chargeable to loans and other funds during the years 1895 to 1901, inclusive :—

Year.	Public Works.		Miscellaneous, including Loans. Rs.	Total. Rs.
	Recurrent. Rs.	Extraordinary. Rs.		
1895	1,756,001	1,286,889	—	3,042,890
1896	1,823,558	1,219,106	—	3,042,664
1897	1,726,669	1,838,650	—	3,565,319
1898	1,900,307	1,510,143	369,324	3,779,774
1899	2,040,684	1,707,119	1,250,125	4,997,928
1900	2,029,279	1,610,261	1,074,665	4,714,205
1901	2,112,905	1,348,032	666,028	4,126,965

162. In accordance with instructions received by Colonial Secretary's letter No. 550, dated 27th May, 1901, the construction of several Extraordinary Public Works was postponed, it being found necessary to reduce the sum of Rs. 1,750,000, the estimated expenditure for this service during 1901, to approximately Rs. 1,350,000.

163. The Public Works Commission appointed on the 11th February, 1900, finished its labours and signed their report on the 11th July, 1901.

164. Amongst the more important works carried out in the Drawing Office at the Head Office may be mentioned :—

- Design for new offices for the Deputy Fiscal at Hulftsdorp, Colombo. The new building is a two-storey building adjoining the new Minor Courts, and provides increased accommodation for the Deputy Fiscal, his Assistant, clerks, and records, and necessary store space.
- Design for new stables, coach-house, latrines, and Jailer's quarters, and general improvements to the south of the Supreme Court buildings.
- Preparation of detail drawings for the new Minor Courts in course of construction.
- Design for new semi-circular counter in the hall of the General Post Office.
- Designs for type police stations.
- Revised designs and working drawings for new Technical College.
- Design for entrance gateways to Customs.
- Design for increased accommodation at the Surveyor-General's Office.
- Designs for post offices at Mannar, Kurunegala, Rakwana, and Kegalla.
- Design for Modara police station, Colombo.
- Design for Inspector's quarters, Fort police station.
- Design for Assistant Government Agent's house, Kalutara.
- Preparation of the necessary designs, detail drawings, and estimates for the several improvements in course of construction at the Customs premises, Colombo.
- Design for new Master Attendant's jetty, Colombo.

FRANCIS A. COOPER, C.M.G.,
M.I.C.E., Fellow of the Sanitary Institute,
Member of the Association of Municipal and County Engineers,
Director of Public Works.

Public Works Department,
Colombo, March 19, 1902.

REPORT OF THE GOVERNMENT FACTORY ENGINEER FOR 1901.

DURING the year 482 orders were received amounting to Rs. 885,620.34, making with Rs. 194,604.54 brought forward from 1900 a total of Rs. 1,080,224.88; to this amount must be added disbursements on account of camps for Prisoners of War and reception of Their Royal Highnesses the Duke and Duchess of Cornwall and York.

The total amount therefore available for expenditure for 1901 was as follows:—

	Rs. c.
Brought forward from 1900	194,604 54
Factory Orders for 1901	885,620 34
Camps for Prisoners of War	90,359 17
Reception of Their Royal Highnesses	6,333 38
Total	1,176,917 43

EXPENDITURE.

The expenditure has been distributed as follows:—

	Rs. c.
Camps for Prisoners of War	90,359 17
Reception of Their Royal Highnesses	6,333 38
Bridges	286,964 12
Buildings	75,845 12
Harbour Improvements	193,378 94
Miscellaneous Departmental	51,323 76
Irrigation	3,659 99
Other Departments	25,668 90
Railway Castings	27,750 32
Plague Precautions	8,019 3
Waterworks	1,586 64
Ragama Cooly Camps	24,020 98
Total	794,910 35

And has been paid in the following manner:—

	Rs. c.
Daily Labour Check-roll	153,029 72
Fuel	17,860 10
Government Stores	444,625 12
Materials purchased	95,001 65
Piecework	84,393 76
Carried forward for expenditure in 1902	794,910 35
Balance unexpended	376,239 72
Total	1,176,917 43

Camps for the Prisoners of War.

There has been an expenditure of Rs. 90,359.17 in connection with the camps at Diyatalawa, Ragama, Hambantota, and Mount Lavinia. The bulk of the expenditure, however, is for the buildings which were erected during the last month of the preceding year. The buildings supplied during this year are as follows:—

Diyatalawa.

- One roof to cover swimming bath, 50 ft. by 19 ft. wide.
- One detention shed, 40 ft. by 20 ft. wide.
- One shed, 20 ft. by 15 ft., with verandah.
- Four buildings, 12 ft. by 12 ft., with verandah.
- One building, 10 ft. by 16 ft. wide.
- Two buildings, 10 ft. by 10 ft. wide.

Ragama.

- One sleeping shed, 10 ft. by 24 ft. wide.
- One mess shed, 60 ft. by 30 ft. wide.
- Two kitchens, 10 ft. by 10 ft. wide.
- One latrine, 21 ft. by 6 ft. wide.

Mount Lavinia.

- One shed, 20 ft. by 15 ft. wide.

VISIT OF THEIR ROYAL HIGHNESSES THE DUKE AND DUCHESS OF CORNWALL AND YORK.

The expenditure (Rs. 6,333.38) on account of the reception of Their Royal Highnesses the Duke and Duchess of Cornwall and York was for the building of the reception pavilion at the jetty and other works in Colombo, the Queen's House, and Pavilion, Kandy.

BRIDGES.

During the year 172 iron bridge spans were made of various lengths at an expenditure of Rs. 286,964.12.

Digarolla.—The work of widening this bridge and putting on a new corrugated flooring and roadway, commenced on the 29th October, 1900, was completed early in the year, and the other estimate for additional stays fixed in concrete cylinders is now in hand, and will be completed at an early date.

Battulu-Oya.—The ironwork of the last span of this bridge, 80 ft. by 14 ft., was completed and despatched to site. The whole bridge was being erected under the charge of the District Engineer, Chilaw.

Bentota.—The ironwork of two spans of 14 ft. each by 14 ft. roadway and one span of 124 ft. by 14 ft. roadway was completed in the Government Factory and forwarded to site. The erection of these were taken in hand on the 20th December, 1901, and the work is making fair progress.

Mahamodara.—The ironwork of this bridge, with a span of 152 ft. by 14 ft. roadway, the largest and heaviest ever made or erected in the Colony, has made fair progress, and will be erected early in 1902.

Dandugama.—This bridge, with a total length of 258 ft. and clear roadway of 14 ft., constructed on cast iron cylinder piers, commenced in August, 1900, was completed on the 20th December, 1901, and opened for traffic.

The superstructure consists of three spans of iron lattice girder, each 86 ft. long, rolled steel cross girders 10 in. by 5 in., corrugated iron flooring 5-16 in. thick, with cement concrete and tar macadam roadway, total dead load 342 tons, and constructed for a safe working load of 125 pounds per square foot of roadway.

The substructure consists of four cast iron cylinder piers, two cylinders 6 ft. in diameter sunk to a firm foundation and filled with cement concrete to each, connected together by riveted plate and angle iron girders and flood plates.

The cylinder piers were sunk to a firm foundation by excavating with a grab and steam crane, and after much trouble from old timber trees sunk in the bed of the river reached the relative depth shown in the following table. The measurements in every case are from road level:—

Pier.		Commenced.	Finished.	Length.	Remarks.	
					Ft. in.	
No. 1	Up stream	Oct. 9, 1900	Dec. 17, 1900	55 6	Tested with 60 tons	
No. 1	Down stream	Oct. 9, 1900	Dec. 29, 1900	51 0		
No. 2	Up stream	Jan. 4, 1901	Jan. 18, 1901	54 6	Tested with 100 tons	
No. 2	Down stream	Jan. 6, 1901	June 1, 1901	55 6		
No. 3	Up stream	June 1, 1901	Sept. 5, 1901	54 0	Tested with 100 tons	
No. 3	Down stream	Aug. 1, 1901	Aug. 27, 1901	55 6		
No. 4	Up stream	Nov. 6, 1900	April 25, 1901	62 9	Tested with 60 tons	
No. 4	Down stream	Nov. 6, 1900	Mar. 2, 1901	61 3		

The test of 60 tons was imposed on each land end pier and 100 tons on the central piers after twelve days, and finding no settlement the weights were removed and the cylinders filled with cement concrete.

The work of rivetting up the girders commenced on the 8th December, 1900. The first span was erected on staging prepared on the Colombo side of the river, and on the 14th March was launched on trestles erected on iron pontoons and landed on No. 2 pier, when the cross girders and platform were fixed. On this span, already in position, the girders for No. 2 span were riveted up and the girders for No. 3 span on the staging, from which No. 1 span had been removed. The No. 2 span was launched and landed on No. 3 pier on the 16th September, 1901, and completed with cross girders and platform, when No. 3 span was moved over No. 1 and No. 2 spans on trolleys and launched and landed on the pier on Negombo side of the river on the 3rd October, 1901, the cost being as follows:—

		Rs. c.
Rivetting up girder	No. 1 span	546 51 labour only
Do.	No. 2 do.	501 37 do.
Do.	No. 3 do.	473 0 do.
Cost of launching	No. 1 do.	233 40 do.
Do.	No. 2 do.	337 83 do.
Do.	No. 3 do.	323 71 do.

The flood plates were then fixed in the stream piers and the concrete put on the bridge and tar macadam, a mixture of 24 gallons tar, 2 cwt. of pitch to each cube of metal broken to a 1-in. gauge, completing the work on the 20th December, 1901.

The total cost on the work has been Rs. 58,233.58, being Rs. 7,411.89 in excess of the estimated amount, due to the rise in price of the materials in England after the estimate had been prepared.

The work was under the immediate supervision of Mr. Jonklaas, Inspector.

BUILDINGS.

The expenditure under this head has been Rs. 75,845.12, principally on account of the new Minor Courts. A small building for cooly tickets was erected at the root of the Breakwater, and the usual supply of doors, windows, and other woodwork for public buildings at outstations.

Minor Courts, situated at Hulftsdorp, adjoining All Saints' Church, having a frontage of 223 ft., with one court at each end 45 ft. by 30 ft., with verandahs 45 ft. by 8 ft., the intervening space, 138 ft. by 38 ft., with upper floor, providing accommodation for Commissioner of Requests, Police Magistrate, their clerks, and records, and two rooms for the members of the Bar, made good progress during the year.

The work was commenced in May, the foundation causing much trouble and extra expense owing to the site being over an old cabook quarry, piles having to be driven in places and a great depth excavated for good foundings. The brickwork, commenced in July, was completed in October. The roof was fixed during November and December. The internal plastering in lime mortar of the office and verandahs was completed, and a large percentage of the external plastering in brick red, all ornaments and enrichments being cast in cement and fixed when plastering. All doors and windows were made, but not fixed. All jakwood joists for flooring were fixed and a few squares of flooring boards laid. The ceiling of the two courts made fair progress. Two latrines, one for clerks of 4 seats and the other for witnesses of 3 seats, have been completed.

The expenditure, Rs. 48,745.77, has been distributed as follows:—

	Rs. c.
Clearing site	457 61
Temporary boarding and office	454 96
Earthwork	921 82
Concrete in foundation	2,608 02
Concrete in floor	214 14
Brickwork	19,761 10
Plastering	2,130 25
Roofing	6,532 59
Wooden flooring	2,314 12
Wooden ceiling	2,464 35
Doors and windows	4,111 95
Iron and lead work	4,014 13
Supervision	869 23
Contingencies	1,891 50
Total	48,745 77

The work was under the immediate supervision of the District Engineer Mr. Jayewardene.

HARBOUR IMPROVEMENTS.

The expenditure of Rs. 193,378.94 was for the following works:—

- (1) Extending the Kochchikada jetties, 30 ft. by 30 ft. each.
- (2) Erecting an iron transhipment warehouse, 150 ft. by 60 ft.
- (3) Erecting two new jetties at the root of the Breakwater, each 80 ft. by 20 ft.
- (4) Continuing the quay wall round the basin of the Harbour from the Wharfage Company's wall to the Master Attendant's jetty.
- (5) One iron shed, 80 ft. by 60 ft.
- (6) Extending warehouses B, C, and D.
- (7) Trincomalee jetty.

(1) *Kochchikada Jetties : Estimated Cost Rs. 31,796.*—The work of extending the two jetties in front of the grain shed commenced in January, and would have been completed at the end of the year had it not been for the hard nature of the cobock through which the cylinders had to be sunk and the south-west monsoon stopping work for some weeks owing to the exposed position of the jetty. The cylinders of these jetties are sunk to 20 ft. below harbour bed. One jetty was completed during the year, and the other, although greatly retarded by finding in November last a mooring chain 8 ft. below harbour bed and across the last cylinder, will be completed early in March.

(2) *Iron Shed for Transhipment Warehouse.*—This shed, 150 ft. by 60 ft., with iron frame and covered with 18 B.W.G. galvanized corrugated iron, with eight double doors 12 ft. wide hung on rollers, cement concrete floors 6 in. thick, and Jarrah blocks 8 in. by 4 in. by 3 in. grouted in with cement and tar, commenced in May, was completed in December at a cost of Rs. 50,595.93.

(3) *Jetties at the Root of the Breakwater.*—Two jetties at the root of the Breakwater, each 80 ft. long by 20 ft. wide, on concrete cylinder piles 5 ft. in diameter sunk to a depth of 20 ft. below harbour bed, were erected. In this work, instead of the ordinary timber wallings and fender beams being used as in other jetties, steel rolled joists 14 in. by 6 in. lined with Jarrah as per section have been used, and the fenders edged with round back angles 3½ in. by 3½ in. by ½ in. to prevent chafing. One jetty was completed in December, and the other would have been but for the want of angle iron for fenders, which did not arrive in the Colony in time.

(4) *Quay Wall : Expenditure Rs. 34,530.*—Constructing a concrete quay wall round the basin of the harbour inside the Customs premises on concrete cylinder piles sunk to 20 ft. below low water mark, commenced in July, made fair progress during the year, a double row of 5 ft. concrete cylinder foundation for a distance of 100 ft. having been sunk.

(5) *Iron Shed, 80 ft. by 60 ft.*—The expenditure on this work during the year was Rs. 10,002.50, and was for all the pillars, roof trusses, purlins, and frames. This building will be erected as soon as the ground in the Customs premises is available.

(6) *Extending B, C, and D Warehouses.*—The expenditure on this work was Rs. 10,719.88 for all the ironwork of trusses, pillars, purlins, and framing made in the Factory. The extension covers an area of 9,900 square feet, the floor of which is to be of Jarrah blocks 8 in. by 4 in. by 3 in. laid on 6 in. cement concrete. The work of erecting was taken in hand late in December, and is making fair progress. The estimated cost of the work is Rs. 57,802.

(7) *Trincomalee Jetty.*—The expenditure on this work during the year, which was Rs. 4,543.07, provided for all the iron piles, girders, bracings, and wooden platform for a new jetty 300 ft. long by 20 ft. broad on iron piles with a covered area of 60 ft. by 30 ft. The materials were despatched to Trincomalee during the year, and are now being erected at that station by the District Engineer.

MISCELLANEOUS DEPARTMENTAL.

The manufacture of the usual departmental tools and plant, such as hand and water carts, road rollers, ramrods, &c., accounted for Rs. 51,323.76.

IRRIGATION.

The work for this department is very little, and amounts to Rs. 3,659.99, principally for cast iron sluices and water stills.

OTHER DEPARTMENTS.

The expenditure of Rs. 25,668.90 under this head shows a large increase over that of the previous year, and represents orders executed for the Master Attendant, Principal Civil Medical Officer, Government Agents, Provincial Road Committees, Local Boards, Government Printer, &c.

RAILWAY CASTINGS.

There has been a very fair increase of outturn from the foundry, the total representing 4,210 cwt., of which 2,369 cwt. of castings were for the Railway Locomotive, Carriage, and Permanent Ways and Works Departments. The expenditure amounts to Rs. 27,750.32.

PLAQUE PRECAUTIONS.

The expenditure of Rs. 8,019.03 under this head represents the cost of erecting a disinfecting station within the enclosure at the Kochchikada grain sheds in place of the hospital ship, which was handed over to the Police. The cost of repairs to the ss. "Serendib" is also included in the aforementioned amount.

WATERWORKS.

The expenditure in connection with the supply of castings for the Waterworks during the year amounted to Rs. 1,586.64.

RAGAMA COOLY CAMP.

On the 9th May I received instructions to proceed with the supply and erection of the buildings for a segregation camp similar to No. 5 cooly camp. All the materials were despatched within five weeks, when the work was stopped. The work of erection, however, was proceeded with early in December, and is now practically completed. This work, together with other Factory Orders in the same connection, amounted to Rs. 24,020.98, and the buildings are as follows :—

- Three buildings, 65 ft. by 18 ft., with two verandahs 7 ft. wide.
- One building, 65 ft. by 18 ft., with two verandahs and latrines.
- One segregation shed, 65 ft. by 18 ft., without verandahs, but with latrines.
- Four latrines with washing-places, 36 ft. by 6 ft.
- Four kitchens, 10 ft. by 10 ft.
- One mortuary, 10 ft. by 10 ft.
- One contractor's kitchen, 20 ft. by 10 ft.
- One watcher's shed, 48 ft. by 12 ft.
- One watcher's shed, 10 ft. by 10 ft., with verandah.

During this year another branch of work has been added to the Government Factory, being the supervision and repair of electric light installations in public buildings. For this work Mr. Rylands has been appointed, and holds the office of Superintendent of Works. His duties since his appointment have been the installing of the Tyre's Tablet System on the Seaside Line of the Government Railway (estimated cost Rs. 1,000), altering lights in the General Post Office and Customs (estimated cost Rs. 166.45), and the repair of all electrical light installations in the Government buildings, Colombo and Kandy.

The large circular cold saw for cutting iron has been received from England and erected on the Machinery Vote at a cost of Rs. 4,080.32, and is proving a most useful machine.

A temporary covering for carpenters to work under is urgently required. Owing to the increase of work in that department many of the men have now to work in the open.

The expenditure on account of works compares very favourably with that of the preceding year. Market payments in that year on account of the camps for Prisoners of War amounted to Rs. 191,023. In 1901 this account amounted to Rs. 95,001.65, a reduction of Rs. 96,021.35, whereas the total expenditure shows a decrease in expenditure of only Rs. 38,731.16, thereby proving that there has in this year also been an increase of Government Public Works over that of the previous years, being an increase in the four items of labour, fuel, materials, and piecework.

I returned from leave on the 6th October and resumed duties. Up to that date the Government Factory and all works under construction were under the charge of the Mechanical Engineer Mr. Hyde, who, with the assistance of the District Engineer Mr. Jayawardene, has carried on the work in a very satisfactory manner.

All the staff have worked well and cheerfully during the past year, and have discharged their duties satisfactorily.

E. C. DAVIES,
Factory Engineer.

Colombo, February 28, 1902.

APPENDIX.

No. 1.—Statement of Expenditure (Annually Recurrent), 1901.

Classification.	Province.										Miscellaneous.	Total.
	Western.	Central.	Northern.	Southern.	Eastern.	North-Western.	North-Central.	Uva.	Sabaragamuwa.			
Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	
164,775 84	262,183 20	76,751 32	116,867 73	86,947 11	118,284 10	86,920 79	163,579 80	130,651 13	—	1,206,961 3	—	
21,112 67	—	3,298 75	96 53	—	12,681 45	—	—	—	182 50	37,092 87	4,549 82	
134 97	—	—	—	4,135 82	—	—	—	—	—	—	—	
24,074 5	12,289 84	7,354 13	9,236 10	6,472 65	4,336 58	8,215 11	3,463 88	4,654 0	—	80,096 34	—	
4,010 91	2,478 78	453 51	1,193 14	331 24	422 50	—	224 24	540 31	—	9,654 63	—	
3,518 91	3,096 32	—	—	—	—	—	—	—	—	6,615 23	—	
752 60	6,397 56	—	—	—	—	—	—	—	—	9,883 81	—	
932 57	6,296 23	2,348 29	1,759 61	1,498 16	1,967 83	2,222 66	802 51	1,931 14	—	32,239 59	—	
—	81 80	—	—	—	—	—	1,891 57	1,322 67	—	—	—	
13,312 92	—	231 20	11 29	—	—	—	—	—	—	13,554 71	—	
2,473 0	—	—	—	—	—	—	—	—	—	2,473 0	—	
4,952 51	5,991 32	995 21	1,102 81	253 31	859 91	2,173 89	407 14	2,394 13	—	19,130 23	—	
736 9	2,183 83	—	165 70	—	318 74	—	17 99	478 56	—	3,900 91	—	
4,306 77	2,411 0	377 59	217 90	351 19	1,417 52	201 4	433 99	915 79	—	10,632 79	—	
190 42	1,915 11	—	—	—	—	—	1,157 3	476 2	—	3,738 58	—	
7,573 52	12,222 3	5,960 41	17,013 87	7,825 38	11,122 9	4,947 92	4,480 13	11,223 95	—	82,369 30	—	
—	—	—	—	—	—	—	—	—	—	1,500 0	—	
1,500 0	5,537 41	2,694 32	1,079 43	4,430 65	6,002 77	1,019 2	2,896 18	1,605 11	162,489 3	202,303 68	—	
14,549 76	—	—	—	—	—	—	—	—	—	—	—	
Total ...	280,906 81	323,084 43	100,561 26	148,647 58	112,245 51	157,413 49	195,700 43	179,354 46	156,375 31	162,489 3	1,726,778 32	

No. 1 A.—Statement of Expenditure (Annually Recurrent), 1901.

Classification.	Province.										Sabaragamuwa.	Total.
	Western.	Central.	Northern.	Southern.	Eastern.	North-Western.	North-Central.	Uva.	Sabaragamuwa.			
Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	
93,189 52	35,044 45	29,718 74	45,965 93	19,169 5	38,926 93	11,419 4	10,038 80	31,941 33	315,413 79	—	—	
—	—	60,749 63	—	2,601 51	—	324 75	—	3,430 52	2,948 52	70,053 94	659 47	
—	—	659 47	—	—	—	—	—	—	—	—	—	
Total ...	61,409 10	—	2,601 51	—	—	324 75	—	3,430 52	2,948 52	70,713 41	—	
Grand Total ...	93,189 52	96,453 55	29,718 74	48,566 44	19,169 5	39,251 68	11,419 4	13,469 32	34,889 85	386,127 20	—	

No. 2.—Statement of Expenditure (Extraordinary Works), 1901.

Classification.	Province.							Miscellaneous.	Total.
	Western.	Central.	Northern.	Southern.	Eastern.	North-Western.	North-Central.	Uva.	
Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.
60,324 89	143,119 74	8,753 56	29,212 24	16,933 19	43,689 61	32,736 99	25,033 25	32,009 39	391,812 86
58,163 46	51,335 67	4,346 97	7,510 20	14,782 2	251 81	8,589 88	1,930 0	18,342 75	165,252 76
8,771 96	7,378 80	1,419 2	2,193 85	2,141 54	—	—	16	2,216 18	24,138 2
6,546 9	9,053 87	9,820 58	—	17,642 48	1,647 17	4,753 23	15,081 45	32,929 53 $\frac{1}{2}$	97,474 40 $\frac{1}{2}$
33,631 27	47,611 11 $\frac{1}{2}$	10,997 19	21,825 4	20,571 81	12,641 71	12,925 25	8,047 69	8,311 39	176,562 46 $\frac{3}{2}$
56,045 80	26,684 22	5,686 93	73,600 98	21,057 6	68,300 30	2,509 8	5,030 63	21,165 2	280,080 2
9,966 43	6,825 93	1,169 37	19,321 94	—	6,864 75	—	—	4,547 73	48,696 15
2,458 56	1,140 75	—	500 0	—	—	—	—	522 18	—
25,694 69	31,270 78	5,713 19	16,336 21	26,122 76	7,190 34	—	250 0	14,804 33	151,944 23
Total ...	261,603 15	324,420 87 $\frac{1}{2}$	47,906 81	170,500 46	119,250 86	440,585 69	71,556 0	70,160 5	134,848 50 $\frac{1}{2}$
									1,340,832 40

No. 2 A.—Statement of Expenditure (Extraordinary Works), 1901.

Classification.	Province.							Sabara-gamuwa.	Total.
	Western.	Central.	Northern.	Southern.	Eastern.	North-Western.	North-Central.	Uva.	
Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.
New Works and Buildings	—	—	—	—	—	—	—
Commutation Money	—	—	—	—	—	—	—
Private Contribution.	—	—	—	—	—	—	—
New Roads	2,875 28	—	—	—	—	—	924 47 $\frac{1}{2}$
Additions and Improvements to Roads	2,047 73 $\frac{1}{2}$	—	—	—	—	—	3,799 75 $\frac{1}{2}$
Repair of Bridges	1,076 40	—	—	—	—	—	2,047 73 $\frac{1}{2}$
Miscellaneous	261 48	—	—	—	—	14 0	1,076 40
Total	—	6,260 89 $\frac{1}{2}$	—	—	—	—	—	275 48
									924 47 $\frac{1}{2}$
									7,199 37

No. 3.—Statement of Expenditure, 1901.

Classification.	Province.						Miscellaneous.			Total.
	Western.	Central.	Northern.	Southern.	Eastern.	North-Western.	North-Central.	Uva.	Sabaragamuwa.	
<i>Annually Recurrent.</i>										
Maintenance of Roads	257,965	36	357,977	28	106,470	6	165,434	17	106,116	16
Maintenance of Inland Navigation...	21,112	67	—	3,298	75	—	12,681	45	—	1,592,428
General (Flood Outlets)	...	...	61,074	26	30,558	73	10,387	13	4,136	82
Repairs to Buildings	...	...	10,185	79	12,583	6	1,372	80	8,302	5
Additions to Buildings	...	...	9,073	52	12,222	3	5,960	41	604	50
Repair of Bridges ...	...	...	14,549	76	6,196	88	2,694	32	7,825	38
Miscellaneous ...	...	...	...	...	...	...	1,079	43	4,430	65
Total Recurrent	...	...	374,096	33	419,537	98	130,280	0	197,214	2
<i>Extraordinary Works.</i>										
New Works and Buildings	60,324	89	143,119	74	8,753	56	29,212	24	16,933	19
Alterations and Additions to Buildings	58,163	46	51,335	67	4,346	97	7,510	20	14,782	2
Special Repairs to Buildings	8,771	96	7,378	80	1,419	2	2,193	85	2,141	54
New Roads ...	6,546	9	11,929	15	9,820	58	—	—	17,642	48
Additions and Improvements to Roads	33,631	27	49,658	85	10,997	19	21,825	4	20,571	81
New Bridges ...	56,045	80	26,684	22	5,686	93	73,600	98	21,057	6
Repair of Bridges ...	9,966	43	7,902	33	1,169	37	19,321	94	6,864	75
Lands and Buildings to be acquired	2,458	56	1,140	75	—	—	500	0	—	—
Miscellaneous ...	...	...	25,694	69	31,532	26	5,713	19	16,336	21
Total Extraordinary ...	...	...	261,603	15	330,681	77	47,906	81	170,500	46
Total Recurrent and Extraordinary ...	635,699	48	750,219	75	178,186	81	367,714	48	250,665	42
<i>Works chargeable to Loans, &c.</i>										
Duplication of Main Harbour Improvements	...	...	1,062	23	—	—	—	—	—	—
Railway Extension Fund—Elephant Pass embankment	...	...	204,529	19	—	—	—	—	—	204,529
Do. Survey of feeder roads	...	...	—	—	38	56	—	—	—	38
Do. Approach road, Anuradhapura station	...	...	—	—	—	—	5,951	86	—	5,951
Plague Preventions	...	...	—	—	—	—	—	—	—	—
Ragama Camp of Observation	...	...	11,104	32	—	—	—	—	—	115
Nuwara Eliya Water Supply	...	...	31,169	69	—	—	950	30	—	62
Sengaladi Resthouse	...	...	—	—	2,736	49	—	—	—	31,169
Converting Infectious Diseases Hospital into Hospital for Police ...	...	...	47	0	—	—	—	4,021	35	2,736
										47 0
										1,348,031
										77
										1,348,031
										29
										3,460,937
										3

Stretching wire across Kumbukkan-oya Platform, Galle Face	1,973 51	9 56
Providing locks for Kankesanturai Post Office	—	—
Repairs to tappa hut at Ahinuwara	31 20	—
Library Hall, Medical College, Colombo	2,827 76	—
Water Supply, Hatton, surveying for Pillar-letter-box opposite to Municipality, Colombo	11 30	80 0
Rebuilding cooly lines, Avisawella...	10 50	—
Seat and 'bucket' for dry-earth closet, Vavuniya Post Office	—	—
Survey of proposed causeway, Andiranadu	—	—
Constructing entrance halls of Planters' and Passengers' Wards into sitting-rooms for nurses	2,245 0	—
Agricultural School, insanitary condition of	632 72	—
Royal Visit	14,368 67	—
Diyatalawa Camp for Prisoners of War	—	197,302 25
Ragama Camp	73,185 41	—
Mount Lavinia Camp	6,443 74	—
Minor Courts, Hulftsdorp (Lapsed Funds)	48,745 77	—
Railway castings	6,111 22	—
Cattle sheds for Municipality, Colombo	—	—
Tin labels, hospital articles, &c.	—	—
Total Loans, &c.	404,456 73	2,747 79
Grand Total	1,040,156 21	752,967 54
		81 85
		950 30
		4,021 35
		5,951 86
		115 80
		197,391 81
		646 0
		49,664 31
		327,684 15
		212,153 34
		4,126,965 9

No. 4.—Return of Roads in charge of the Public Works Department, 1901.

No. 4.—Return of Roads—*continued.*

Name of Road.	Length in Miles.		Cost of Maintenance during 1901.		Width of Track in Feet.	Average Cost per Mile.	Traffic Average Number of Carts per Diem over portions.			
	Metalled.	Gravelled.	Metalled.	Gravelled.			Metalled.	Gravelled.		
CENTRAL PROVINCE—<i>contd.</i>										
KATUGASTOTA DISTRICT—<i>contd.</i>										
<i>Branch Roads.</i>										
Dolale road ...	8.18	—	2,389	—	8	291	—	—		
Duckwari bazar to Kotaganga	1.75	—	1,729	—	8	988	—	—		
Madulkele to Kabaragala	3.25	—	2,605	—	8	801	—	—		
Madulkele to Bambata-ela	7.75	—	3,761	—	8	485	—	—		
Nugatenna gap to Kobonila	4.77	—	2,363	—	8	495	—	—		
Rangalla-Nine Cave road	3.75	—	1,229	—	8	328	—	—		
Alagala to Kadugannawa	5.25	—	2,740	—	8	522	—	—		
<i>Matale District.</i>										
Balakaduwa to junction of Trincomalee-Anuradhapura road	36.50	—	28,551	—	12	782	—	138		
Beligamuwa to Mirisgoni-oya	14.10	—	2,909	—	12	206	—	22		
Kalawewa to Galawela	7.50	—	1,640	—	12	218	—	—		
Naula via Elahera to Pallegama	16	15	31	2,153	3,296	134	220	—		
Matale to Rattoota	—	—	6.50	—	3,407	524	—	32		
Palaparwela to Galawela	—	—	19	—	3,755	416	—	16		
Ukuwela road	—	—	1.38	—	574	—	—	—		
<i>Pussellawa District.</i>										
Approach roads to public buildings and to railway stations, Gampola and Ulapane	—	—	65	—	10	489	—	26		
Gampola to Pussellawa	—	—	12	—	10	891	—	43		
Gampola to Nawalapitiya	—	—	10.70	—	10	4,999	—	12		
Pundaluoya-Watagoda road	—	—	7.15	—	10	3,199	—	15		
Pussellawa to Ramboda	—	—	9	—	10	5,399	—	12		
<i>Branch Roads.</i>										
Pupurella road	—	—	10	—	10	6,610	—	17		
Pundaluoya-Tawalantenna road	—	—	9.25	—	10	4,686	—	7		
<i>Nuwara Eliya District.</i>										
Ambawela road	—	—	65	—	10	661	—	6		
Blackpool bridle path	—	—	12	—	10	506	—	—		
Approach road to public buildings, Nuwara Eliya	7.80	—	7.80	316	—	385	—	—		
...	—	—	3.54	—	934	—	264	—		

No. 4.—Return of Roads—*continued.*

Name of Road.	Length in Miles.		Cost of Maintenance during 1901.		Width of Track in Feet.	Average Cost per Mile.		Traffic Average Number of Carts per Diem over portions.	
	Natural.	Gravelled.	Metalled.	Gravelled.		Natural.	Gravelled.	Metalled.	Metalled.
CENTRAL PROVINCE—<i>contd.</i>									
Dikoya District— <i>contd.</i>									
Norwood-Uppot road	...	—	8.25	—	8.25	Rs.	Rs.	Rs.	Rs.
Wararajah road	...	—	4.50	—	4.50	—	—	—	—
Amfield road	...	—	3.50	—	3.50	—	—	—	—
Total ...	65.25	70.74	634.33	—	670.32	Rs. 5,009	Rs. 16,465	Rs. 336,237	Rs. 357,711
NORTHERN PROVINCE.									
JAFFNA DISTRICT.									
Achchuveli to Tondaimannar...	...	10	—	3.50	—	3.50	Rs. 10	Rs. 671	Rs. 349
Drainage channels	...	—	—	—	—	—	—	—	—
Gravels of Jaffna	...	—	44	—	44	—	—	—	—
Jaffna to Karaiyiru	...	—	14.25	—	14.25	—	—	—	—
Jaffna to Kankesanturai	...	—	11.50	—	11.50	—	—	—	—
Jaffna to Point Pedro	...	—	21	—	21	—	—	—	—
Jaffna to Kaitadi	...	—	6.50	—	6.50	—	—	—	—
Manipai to Kaitadi	...	—	8	—	8	—	—	—	—
Punnalai road	...	—	10.50	—	10.50	—	—	—	—
Pannaiturai to Kayts	...	—	10	—	10	—	—	—	—
Point Pedro to Punnalai	...	—	25	—	25	—	—	—	—
Tilippalai to Pandatirippu	...	—	4.50	—	4.50	—	—	—	—
Valai to Valliveddiurai	...	—	3.50	—	3.50	—	—	—	—
Valukkai-aru to Velanai	...	—	4	—	4	—	—	—	—
PALAI DISTRICT.									
Chavakachcheri to Karaviddi...	...	—	12	—	12	—	—	—	—
Karanavai to Tunnalai	...	—	5.50	—	5.50	—	—	—	—
Kaitadi to Kokavil	...	—	44	—	44	—	—	—	—
Point Pedro to Kodikamam	...	—	8.50	—	8.50	—	—	—	—
Puttar to Kodikamam	...	—	8.50	—	8.50	—	—	—	—
VAVUNIYA DISTRICT.									
Central road to Mullaithivu (new trace)	...	—	10	—	44.25	—	10	—	—
Kokavil to Galkandamadu	...	—	4.50	—	2.50	—	—	—	—
Mullaithivu to Central road (old trace)	...	—	22.25	—	7	—	559	—	—
Vavuniya to Parayanalankulam	...	—	6	—	6	—	22.25	—	—
Vavuniya towards Horawapotana	...	—	—	—	—	—	719	—	—

MULLAITTIVU DISTRICT.											
Central road to Mullaittivu (new trace)											6
Mullaittivu to Central road (old trace)											—
...	—	15.50	5	—	—	20.50	—	985	—	2,648	2,050
...	20	—	—	—	—	20	—	—	—	4,698	985
MANNAR DISTRICT.											
Coast road to Colombo											—
...	...	75.50	2	—	—	77.50	3,376	175	—	3,551	20
...	...	—	2.50	—	—	2.50	—	1,374	—	15	—
...	...	11	28.25	13.70	—	52.75	732	4,948	7,700	13,380	60
Total ...											
SOUTHERN PROVINCE.											
GALLE DISTRICT											
Bentota to Goyyapanama											—
...	...	—	43.25	—	—	43.25	—	—	—	30,524	—
...	...	—	6.50	—	—	6.50	—	—	—	3,535	—
...	...	—	22.75	—	—	22.75	—	—	—	13,272	—
...	...	—	21	—	—	21	—	—	—	12,743	—
...	...	—	—	—	—	—	—	—	—	1,755	—
...	...	—	2.70	—	—	2.70	—	—	—	1,755	—
...	...	—	3.25	2	—	5.25	—	—	—	690	—
...	...	—	—	—	—	4.75	—	—	—	6,454	—
...	...	—	—	—	—	3.5	—	—	—	326	—
MATARA DISTRICT.											
Akressa to Wharahena											—
...	...	—	33	—	—	33	—	—	—	19,151	—
...	...	—	8	—	—	8	—	—	—	3,284	—
...	...	—	36	—	—	36	—	—	—	20,633	—
...	...	—	7	5	—	12	—	—	—	1,764	—
...	...	—	—	—	—	—	—	—	—	1,333	—
...	...	—	—	—	—	15	—	—	—	5,550	—
...	...	—	—	—	—	1:25	—	—	—	489	—
...	...	—	—	—	—	1:40	—	—	—	378	—
...	...	—	—	—	—	12:33	—	—	—	1,759	—
Branch road.											
Deniyaya to Hayes											—
...	...	—	—	—	—	10:50	—	—	—	5,202	—
HAMBANTOTA DISTRICT.											
Hambantota to Tanamalwila											—
...	...	—	7.50	21	—	28.50	—	—	—	12,561	—
...	...	—	—	2	—	2	—	—	—	1,582	—
...	...	—	—	26	—	26	—	—	—	15,913	—
...	...	—	—	—	—	—	—	—	—	—	—
...	...	—	11	—	—	11	—	—	—	1,516	—
...	...	—	5.50	—	—	5.50	—	—	—	594	—
...	...	—	6.25	5	—	11:25	—	—	—	900	1,385
Total ...											
Digitized by Noolaham Foundation.											
noolaham.org | aavanaham.org											

No. 4.—Return of Roads—*continued.*

Name of Road.	Length in Miles:			Cost of Maintenance during 1901.			Width of Track in Feet.			Average Cost per Mile.			Traffic Number of Carts per Diem over portions.					
	Gravelled.	Natural.	Total.	Metalled.	Gravelled.	Natural.	Total.	Metalled.	Gravelled.	Natural.	Total.	Metalled.	Gravelled.	Natural.	Metalled.	Gravelled.	Natural.	
EASTERN PROVINCE.																		
BATTICALOA DISTRICT.																		
Coast road north, Batticaloa District	—	26.50	20.50	—	47	3.50	—	5,455	5,370	—	20,825	—	—	205	749	—	100	
Kalkuda road	—	—	3.50	—	—	44.25	—	—	1,884	—	27,162	—	—	—	538	—	12	
Madupi-oya to Era yur	...	—	—	—	—	—	—	—	—	—	143	—	—	—	613	—	92	
Punkinduvveli road	...	—	1.50	—	—	—	—	—	—	—	949	—	—	—	316	—	4	
Road from the resthouse to the bar, Batticaloa	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	30	
KALAMUNAI DISTRICT.																		
Akkaraiapattu-Sagamam road...	—	5.50	6	—	11.50	—	—	830	1,701	—	2,531	—	8	14	—	—	150	
Arasadi to Malkomppaddi	—	3.25	—	—	3.25	—	—	649	—	—	649	—	10	—	—	—	199	
Akkaraiapattu-Jrakkamam road	—	1	—	—	—	1	—	200	—	—	200	—	10	—	—	—	200	
Coast road south	30	20	48	—	98	45.0	—	4,533	13,737	—	18,720	20	12	14	—	—	15	
Karaitivu to Sammanturai and Trakkamam	—	4	9	—	13	—	—	544	1,956	—	2,500	—	8	14	—	—	226	
Kalmannai-Chadiyantala road	—	5.50	2	—	7.50	—	—	582	868	—	1,450	—	10	14	—	—	434	
Pottuvil-Munppane road	—	7	8.50	—	15.50	—	—	372	1,628	—	2,000	30	10	—	—	—	53	
TRINCOMALEE DISTRICT.																		
Coast road, Trincomalee District	17	25.34	—	—	42.34	256	—	8,440	—	—	8,696	16	10	—	—	15	333	
Gravels of Trincomalee	—	5.40	—	—	5.40	—	—	—	1,202	—	—	1,202	—	16	—	—	—	223
Road from the salt store at Nilaveli to the high road	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	349
Trincomalee to Kituluttu	—	—	61	—	—	61	—	213	—	—	213	—	6	10	—	—	—	390
Trincomalee towards Anuradhapura	—	—	22.50	—	22.50	—	—	—	4,997	—	—	4,997	—	16	—	—	—	222
Total	54	132.60	162.25	—	348.85	1,078	—	30,365	78,975	—	105,418	—	—	—	—	—	20	229
NORTH-WESTERN PROVINCE.																		
KURUNEGALA DISTRICT.																		
Approach roads to public buildings	—	—	—	—	—	—	—	—	—	—	307	—	—	—	—	—	—	307
Getawana circular road	—	—	—	—	—	—	—	—	—	—	571	—	—	—	—	—	—	571
Kurunegala to Nikaweratiya	—	—	—	—	—	—	—	—	—	—	11,098	—	—	—	—	—	—	11,098
Kurunegala to Beligamuwa	—	—	—	—	—	—	—	—	—	—	1,555	—	—	—	—	—	—	5,289
Kurunegala to Galagedara	—	—	—	—	—	—	—	—	—	—	13.50	—	—	—	—	—	—	5,810
Padeniya to Siyambalpura	—	—	—	—	—	—	—	—	—	—	33.50	—	—	—	—	—	—	8,025
Polgahawela to Kurunegala	—	—	—	—	—	—	—	—	—	—	12	—	—	—	—	—	—	4,042
Railway approach roads and Edinburgh street	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	538
Kurunegala-Polgahawela road to Lowlands estate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	654
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	565

PUTTALAM DISTRICT.		CHILAW DISTRICT.		DANDURAGAMA DISTRICT.		NORTH-CENTRAL PROVINCE.	
Akkaraipattu road	...	25	83	7,211	137	7,348	—
Main road to Kirankala bridge	...	29	—	200	—	200	—
Nikaweratiya to Puttalam	...	23.50	—	16,151	—	16,151	—
Puttalam to Kala-oya	...	6	4	—	9,939	9,948	—
Puttalam to Battinlu-oya	...	9	2	2,341	2,933	2,674	—
Puttalam to Madurugama	...	30	—	41	1,814	—	—
Service road at Palavi	...	4.50	—	985	899	—	—
Road to salt stores and town roads, Puttalam	—	10.50	—	—	4,800	—	—
Bo-tree road	...	—	—	1,25	—	420	—
Chilaw-Wariyapola road	...	16	32	—	3,343	6,055	—
Madampe to Dummalasuriya	...	—	6	—	—	3,337	—
Natandiya to Marawila	...	—	3	—	—	1,305	—
Plakatumulla road	...	2	—	—	284	284	—
Toppu to Battinlu-oya	...	1	—	34	153	23,885	24,041
Toppu to Dankotawa	...	—	—	2.25	—	689	689
Approach roads to Government buildings	...	1	—	—	378	—	378
Dankotawa-Girihala road	...	—	—	18	18	—	—
Kurnegala to Girihala	...	—	2	22	22	—	—
Kompaspara	...	—	—	—	300	7,265	—
Maharagama to Polgahawala	...	—	—	14.25	14.25	—	—
Narammulla to Dummalasuriya	...	—	—	22.25	22.25	—	—
Total	...	76.71	175.67	143	425.38	985	18,788
ANTERADHAPURA DISTRICT.	...	—	—	—	—	65,977	157,534
Anuradhapura to Siyambalagama	...	9.37	9.63	—	1,853	4,428	—
Approach roads to public buildings	...	.47	.43	19	21	6,281	—
Inner Circular road, Anuradhapura	...	1.20	.50	.90	.43	1.52	—
Kala-oya to Galgodaheena	...	—	—	1.70	1.07	9	—
Mirisgoni-oya to Galkandamadu (Galkulam to	...	—	—	26.25	—	10,832	—
Rambewa)	...	1.50	16.50	—	232	7,139	—
Outer Circular road, Anuradhapura	...	6.25	—	18	300	7,371	—
Talawa to Kekirawa	...	13.25	—	6.25	1,741	10	—
13.25	—	—	—	13.25	—	10	—
MIHINTALE DISTRICT.	...	—	—	—	—	9	—
Galkulam through Mihintale to Rambewa	...	11.87	—	11.87	—	4,513	—
Horawapotana towards Vavuniya	...	22.60	—	22.60	—	2,907	—
Kala-oya to Galgodaheena	...	5.25	—	33	38.25	16,967	—
Madawachchchima to Yakkewwa	...	7.32	—	—	7.32	2,263	—
Mirisgoni-oya to Galkandamadu (Rambewa to	...	—	—	—	—	7,542	—
Galkandamadu)	...	17	—	17	—	7,542	—
MARADANKADAWALA DISTRICT.	...	—	—	—	—	—	—
Harabana-Topawewa road	...	25	—	25	—	3,548	—
Migasewwa to Kithulthu	...	—	—	28.22	9.50	13,467	—
Mirisgoni-oya to Kithulthu	...	—	—	—	37.72	13,467	—
Mirisgoni-oya to Galkandamadu (Mirisgoni-oya	...	—	—	—	—	14,525	—
to Galkulam)	...	—	—	—	—	—	—

No. 4.—Return of Roads—*continued.*

Name of Road.	Length in Miles			Cost of Maintenance during 1901.			Width of Track in Feet.			Average Cost per Mile.			Traffic Average Number of Carts per Diem over portions.		
	Natural.	Gravelled.	Metallic.	Natural.	Gravelled.	Metallic.	Total.	Natural.	Gravelled.	Metallic.	Total.	Natural.	Gravelled.	Metallic.	Total.
NORTH-CENTRAL PROVINCE—<i>contd.</i>															
MARADANKADAWALA DISTRICT— <i>contd.</i>															
Kekirawa to Kalawewa	...	—	20.70	—	—	20.70	—	2,525	—	2,525	—	16	—	—	—
Kalawewa to Galawewa	...	—	15.60	—	—	15.60	—	2,496	—	2,496	—	16	—	—	—
Maradankadawela to Habarana	...	—	6.50	—	—	6.50	—	850	—	850	—	16	—	—	—
Kekirawa to Talawewa	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	...	8.60	138.28	101.78	68.75	317.41	—	24,112	74,318	98,430	—	—	—	174	436
PROVINCE OF UVA.															
BADULLA DISTRICT.															
Badulla to Taldena	...	—	10.50	—	—	10.50	—	—	—	5,950	—	9	—	—	10
Badulla to Haputale	...	—	25.75	—	—	25.75	—	—	—	24,003	—	12	—	—	79
Dikwella to Madulla	...	—	5.25	—	—	5.25	—	—	—	4,249	6	9	—	—	15
Dikwella to Hakgala	...	—	20.25	—	—	20.25	—	—	—	3,209	—	12	—	—	8
Kumbalwela to Passara	...	—	11	—	—	11	—	—	—	6,524	—	9	—	—	14
Lower Badulla road	...	—	15	—	—	15	—	749	—	9,065	—	6	—	—	824
Naula-Spring Valley road	...	—	—	—	—	7.60	—	—	—	5,289	—	9	—	—	695
Railway station road	...	—	—	—	—	1.18	—	—	—	179	—	10	—	—	994
Umaoya-Uda Fussellawa road...	...	—	9	—	—	9	—	560	—	560	—	6	—	—	385
Approach roads to public buildings	...	—	1.55	—	—	1.55	—	497	—	497	—	10	—	—	572
Bandarawela to Windy Corner	...	—	—	—	—	6	—	—	—	3,437	—	10	—	—	—
Branch Road.															
Windy Corner to Leungahawela	...	—	—	—	—	2	—	—	—	998	—	10	—	—	8
PASSARA DISTRICT.															
Badulla to boundary of Eastern Province	...	—	5	—	—	49.50	—	49.50	—	34,998	—	12	—	—	35
Bibile to Medagama	...	—	11	—	—	11	—	10	430	1,244	10	12	—	—	2
Bibile to Alutuwara	...	—	—	—	—	—	—	—	2,547	—	12	—	—	—	2
Kumbalwela-Passara road	...	—	—	—	—	—	—	—	6,000	—	10	—	—	—	12
Passara-Madusima road	...	—	—	—	—	—	—	—	6,399	—	10	—	—	—	568
Forest Hill to Dunedin factory	...	—	—	—	—	—	—	—	1,469	—	10	—	—	—	4
Passara-Mupane road to 9th mile	...	—	—	—	—	—	—	—	550	—	6	—	—	—	—
Branch Road.															
Passara to Madulsima road from 11½ milepost to 15·50 milepost	...	—	—	—	—	4.25	—	—	—	2,440	—	10	—	—	6
						—	—	—	—	—	—	—	—	—	574

No. 4.—Return of Roads—*continued.*

Name of Road.	Length in Miles.			Cost of Maintenance during 1901.			Width of Track in Feet.			Average Cost per Mile.			Traffic Acreage Number of Carts per Diem over portions.				
	Natural.	Gravelled.	Metalled.	Natural.	Gravelled.	Metalled.	Natural.	Gravelled.	Metalled.	Natural.	Gravelled.	Metalled.	Natural.	Gravelled.	Metalled.	Track Metalled.	Traffic Metalled.
PROVINCE OF SABARAGAMUWA— <i>cont'd.</i>																	
KEGALLA DISTRICT.																	
Ambepussa to Alawwa	...	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—
Dolosbage to Rambukkana	...	—	—	19.50	19.50	—	—	600	500	—	—	—	—	—	—	—	—
Kandy road, 34th milepost to Kadugannawa	...	—	—	28	—	—	—	10,050	10,050	—	—	—	—	—	—	—	28
Kegalla to Polgahawela	...	—	—	7.25	7.25	—	—	11,196	11,196	—	—	—	—	—	—	—	45
Kegalla to Bulakkohopitiya	...	—	—	16.25	16.25	—	—	2,899	2,899	—	—	—	—	—	—	—	60
Roads in Government premises, Kegalla	...	—	—	1.50	—	—	—	8,937	8,937	—	—	—	—	—	—	—	30
Kinadeniya road	...	—	—	—	—	—	—	379	379	—	—	—	—	—	—	—	20
<i>Branch Road.</i>																	
Givilipitiya to Hatampola	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
*Total	...	25	17.94	185.97	80.59	3,444	4,859	122,965	35,282	165,550	—	—	—	—	—	—	—
											97	270	661	437	—	—	—

No. 5.—Bridges constructed at the Government Factory in 1901.

No. of Spans.	Name.	Span.	Clear Width.	Weight per Foot run.	Girders.	Flooring.	Road Material.	Total Dead Weight.	Safe Live Load distributed per square foot.	Estimated Cost.		Type of Bridge.
										Rs. c.	Rs. c.	
1	Bentota bridge	141 0	14 0	11.84	2.82	10.00	3,477.06	125	115 71	8,100	0	Lattice girders and corrugated flooring
1	Bentota bridge	124 0	14 0	9.84	2.80	10.00	2,807.36	125	125	80 0	0	do.
1	Battulu-oya bridge	80 0	14 0	5.72	2.90	10.00	1,489.60	125	116 25	27,900	0	do.
1	Digarolla bridge flooring (20 spans of 30 ft.)	—	14 0	—	—	—	—	—	40 24	24,387	0	Corrugated floor (erected)
1	Bridge for Wellampitiya, 4-5 mile Avissawella road	70 0	14 0	4.40	2.50	8.65	1,088.50	125	115 71	8,100	0	Lattice girders and corrugated flooring
1	Bridge for the Pussellawa District	50 0	10 0	3.00	2.00	7.20	610.00	125	80 0	4,000	0	do.
1	Bridge for the Tangalla District	50 0	10 0	3.00	2.00	7.20	610.00	125	96 0	4,800	0	do.
1	Bridge for the Galle and Udugama road	45 0	10 0	2.90	2.00	7.20	544.50	125	88 90	4,000	0	do.
1	Bridge at the 95th mile, Ratnapura-Halpe road	42 0	10 0	2.90	2.00	7.20	508.20	125	104 80	4,400	0	do.
2	Bridges for the Pussellawa District	40 0	10 0	2.30	2.00	7.20	460.00	125	82 50	6,600	0	do.
1	Bridge, Medagama-Obbekota road	40 0	10 0	2.30	2.00	7.20	450.00	125	75 62	3,025	0	do.
1	Bridge, Mafara-Alkureesa road	30 0	11 4	3.39	1.06	8.01	352.70	125	55 0	1,650	0	Rolled beams and curved plates
1	Bridge over the Talivalle-oya	30 0	11 4	3.39	1.06	8.01	392.70	125	50 0	1,500	0	do.
1	Bridge for the Ratnapura District	30 0	11 4	3.39	1.06	8.01	392.70	125	60 0	1,800	0	do.
1	Bridge for the Nuwara Eliya District	30 0	14 10	4.21	2.10	10.07	510.30	125	63 34	1,900	0	do.
1	Bridge for the Madampe-Humbantota road	30 0	11 4	3.39	1.06	8.01	392.70	125	60 0	1,800	0	do.
2	Bridges for the Trincomalee-Kandy road	30 0	14 0	4.21	2.10	10.07	352.70	125	76 0	4,560	0	do.
3	Bridges for the Maduraoya-Eravur road	30 0	14 10	4.21	2.10	10.07	510.30	125	76 0	6,840	0	do.
4	Bridge over the Seigal-oya	30 0	14 10	4.21	2.10	10.07	2,108.00	—	129 61	16,072	20	do.
5	Bridges over the Tumu-oya	30 0	14 10	4.21	2.10	10.07	2,568.00	—	134 70	20,745	0	do.
142	H iron bridges under 30 ft. span	—	—	—	—	—	17,325.50	125	—	71,913 30	—	Corrugated flooring and curved plates
										296,532	50	

No. 6.—Distribution of Factory Expenditure, 1900 and 1901.

Year.	Daily Labour.	Fuel.	Government Store Payments.	Piecework.	Market Payment.	Total.
1901	Rs. c. 153,029 72	Rs. c. 17,860 10	Rs. c. 444,625 12	Rs. c. 84,393 76	Rs. c. 95,001 65	Rs. c. 794,910 35
1900	Rs. c. 151,010 49	Rs. c. 11,551 64	Rs. c. 396,892 14	Rs. c. 83,164 17	Rs. c. 191,023 7	Rs. c. 833,641 51
Increase	... 2,019 23	... 6,308 46	... 47,732 98	... 1,929 59	—	—
Decrease	... —	... —	... —	—	96,021 42	38,731 16

No. 7.—Classification of Factory Expenditure, 1898 to 1901.

Year.	Bridges.	Buildings.	Customs Improvements.	Departmental Charges.	Irrigation.	Other Departments.	Railway Castings.	Waterworks.	Plague Precautions.	Camps for Prisoners-of-War.	Royal Visit.	Total.
1898	Rs. c. 145,103 17	Rs. c. 21,606 81	Rs. c. 99,521 90	Rs. c. 48,332 27	Rs. c. 5,272 37	Rs. c. 18,615 20	Rs. c. 10,162 17	Rs. c. 16,831 32	Rs. c. 42,960 54	Rs. c. —	Rs. c. —	Rs. c. 408,405 75
1899	... 222,822 24	... 44,545 2	... 183,680 46	... 53,369 24	... 6,881 28	... 27,567 47	... 13,801 66	... 6,440 44	... 60,948 78	—	—	... 620,056 59
1900	... 240,665 70	... 34,148 0	... 68,603 35	... 52,437 69	... 4,333 73	... 16,583 90	... 20,492 87	... 2,275 43	... 3,298 0	... 391,802 84	... 90,359 17	... 833,641 51
1901	... 286,964 12	... 75,845 12	... 193,378 94	... 51,323 76	... 3,659 99	... 25,668 90	... 27,750 32	... 1,586 64	... 32,040 1	... 6,333 38	... 794,910 35	

No. 8.—Statement of Supply and Consumption of Water during 1901.

Month.	Total Supply for the Month.	Total Consumption for the Month.			Daily Consumption.		Rainfall in Inches.	
		Unmetered.	Metered.	Total.	Maximum.	Minimum.	Labugama.	Colombo.
January ...	Gallons. 87,233,278	Gallons. 69,632,754	Gallons. 13,399,400	Gallons. 83,032,154	Gallons. 2,893,296	Gallons. 2,319,160	Inches. 17.37	Inches. 11.91
February ...	78,961,344	65,778,120	12,305,270	78,083,390	3,149,578	2,533,056	13.11	3.55
March ...	85,400,683	73,048,936	13,449,390	86,498,326	3,144,871	2,151,858	10.83	5.12
April ...	84,326,047	67,958,533	13,210,520	81,169,053	3,008,249	2,363,409	9.30	8.71
May ...	86,704,949	73,574,869	13,511,399	87,086,268	3,046,014	2,499,931	13.83	6.28
June ...	84,444,479	71,192,490	12,734,570	83,927,060	2,951,861	2,332,276	17.36	5.93
July ...	86,303,643	73,290,020	13,158,010	86,448,030	3,088,381	2,403,597	11.12	4.52
August ...	87,254,201	74,557,735	12,140,970	86,698,705	3,083,674	2,396,363	6.30	4.46
September ...	82,447,175	67,954,413	13,194,300	81,148,713	2,934,482	2,405,778	10.37	3.93
October ...	87,421,488	73,120,806	13,980,290	87,101,096	2,975,418	2,510,441	14.57	3.91
November ...	84,363,332	65,804,927	17,171,930	82,976,857	2,989,522	2,439,614	15.06	19.84
December ...	87,421,488	73,046,975	14,741,650	87,788,625	3,036,600	2,608,207	5.95	1.70
Total ...	1,022,282,107	848,960,578	162,997,699	1,011,958,277	—	—	145.17	75.86

No. 9.—Monthly Return of Water supplied by Meter in each of the Nine Wards of the City during the Year 1901.

Month.	Wards.									Total.
	Fort.	Pettah.	St. Sebastian.	St. Paul's.	Slave Island.	Kotahena.	New Bazaar.	Maradana.	Kollupitiya.	
January ...	Gallons. 3,918,530	Gallons. 2,468,460	Gallons. 27,580	Gallons. 598,910	Gallons. 422,140	Gallons. 249,890	Gallons. 33,230	Gallons. 4,354,080	Gallons. 1,326,580	Gallons. 13,399,400
February ...	3,918,900	2,105,060	25,280	528,630	472,030	307,510	30,060	3,658,730	1,259,070	12,305,270
March ...	4,085,980	2,276,400	20,940	592,600	478,360	367,710	33,780	4,246,520	1,347,100	13,449,390
April ...	3,880,230	2,615,900	23,070	242,830	559,890	403,050	33,720	4,257,520	1,194,310	13,210,520
May ...	3,792,210	2,830,750	27,300	175,220	508,270	449,340	43,400	4,410,339	1,274,570	13,511,399
June ...	3,417,110	2,841,710	22,500	137,520	427,930	419,550	25,420	4,253,320	1,189,510	12,734,570
July ...	3,537,860	2,976,990	22,470	130,840	428,450	432,340	28,620	4,342,500	1,257,940	13,158,010
August ...	2,997,150	2,776,870	28,040	380,750	432,920	466,880	34,890	3,638,520	1,384,950	12,140,970
September ...	3,138,640	3,205,150	22,360	603,960	442,930	530,970	40,290	3,697,100	1,512,900	13,194,300
October ...	3,114,970	3,025,710	26,020	590,160	653,260	479,710	49,410	4,379,070	1,661,980	13,980,290
November ...	3,449,210	3,572,690	8,200	411,030	1,086,770	602,650	202,040	5,865,070	1,974,270	17,171,930
December ...	2,876,100	3,175,520	24,420	501,590	993,530	521,210	186,190	4,566,230	1,896,860	14,741,650
Total ...	42,126,890	33,871,210	278,180	4,894,040	6,906,480	5,230,810	741,050	51,668,999	17,280,040	162,997,699

No. 10.—Monthly Analysis of Water during the Year 1901.

Month and Date.	Colour.	Matched by	Grains per Gallon.						Microscopical Examination.			Remarks.	
			Chlorine.	Phosphoric Acid.	Nitrogen in Nitrates.	Ammonia.	Oxygen absorbed in four hours at Ordinary Temperature.	Total Solid Matter dried at 220° F.	Mr. T. Cockrell's Analysis.	Satisfactory	do.	do.	
1901.										...	...	...
February 6	Yellow	1.5°	.1600	Traces	.0023 Absent	.0021	.0028	.0184	1.5				The water was of good quality; fit for human consumption
March 4	do.	1.5°	.1529	do.	.0083	do.	.0008	.0016	.0268	1.54			do.
March 18	do.	2.5°	.1490	do.	.0086	do.	.0021	.0045	.0033	1.82			do.

NOTE.—I regret to say that I have not been furnished with any further analyses made during 1901.

No. 11.—Abstract of Provincial Engineers' Travelling for the Year 1901.

Provincial Engineer,	Western Province	Central Province	Northern Province	Southern Province	Eastern Province	North-Western Province	North-Central Province	Province of Uva	Province of Sabaragamuwa	Total Number of Days	Total Number of Miles travelled.	Average Mileage per Diem.	Number of Nights slept out.	Average Allowance drawn per Mile.	Total Number of Miles of Roads in Province.
										travelled.	travelled.	travelled.	travelled.	travelled.	travelled.
Do.	161	3,342	20.75	125	4.47	358.20									
Do.	177	4,992	28.20	129	.44	670.33									
Do.	199	3,762	18.90	154	.50	517.50									
Do.	151	2,708	18.00	129	.63	320.28									
Do.	187	3,875	20.72	146	.42	348.86									
Do.	152	2,275	14.96	124	.67	425.38									
Do.	163	2,568	15.75	128	.62	317.41									
Do.	190	3,100	16.31	142	.67	373.36									
Do.	145	2,352	16.22	131	.68	309.50									

