



ADMINISTRATION REPORT

OF THE

PUBLIC WORKS DEPARTMENT,

GENERAL AND BUILDINGS AND ROADS BRANCH,

IN THE

MADRAS PRESIDENCY,

FOR THE YEAR

1882-83.



MADRAS:

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No. I.—Statement showing Outlay compared with Grant under Departmental Heads.

Heads of Service.	IMPERIAL.									
	MILITARY.					CIVIL BUILDINGS, ROADS AND SERVICES.				
	Original Budget Grant.	As modified after the issue of the Budget Orders.	Expenditure.	Expenditure compared with Modification.	More.	Less.	Original Budget Grant.	As modified after the issue of the Budget Orders.	Expenditure.	Expenditure compared with Modification.
Original Works ..	RS. 2,17,524	RS. 2,94,400	RS. 2,48,365	RS. 46,035	RS. 19,855	RS. 22,106	RS. 1,00,000	RS. 1,78,800	RS. 2,01,206	RS. 22,406
Repairs ..	2,75,000	2,73,100	2,92,953	..	..	5,079	5,000	4,400	5,079	699
Establishment ..	1,15,126	1,15,100	1,11,767	3,333	..	46,378	60,836	42,150	3,228	3,228
Tools and Plant ..	12,360	7,400	7,221	179	..	3,028	10,000	2,750	..	278
Profit and Loss ..	..	..	..	..	..	..	..	..	..	..
Suspense Balance.	..	..	..	..	..	..	..	..	..	..
Stock ..	..	..	..	..	..	..	..	..	..	..
Stock Purchases and Sales ..	..	..	..	..	..	..	..	..	..	..
Miscellaneous Advances ..	..	..	..	..	..	..	..	..	..	..
London Invoices ..	..	..	..	..	..	..	..	..	..	..
Do. Stores ..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	6,20,000	6,90,000	6,60,308	49,547	19,855	2,54,711	2,00,000	2,28,100	2,54,711	26,611
Less Expenditure in England ..	..	..	..	..	..	..	..	..	..	..
Net Excess ..	..	..	..	..	..	..	..	..	..	..
Net Saving ..	..	..	..	..	..	..	..	..	..	..

The general result of the year's working may be gathered from the following tables supplied by the Examiner, Public Works Accounts:—

ADMINISTRATION REPORT OF THE PUBLIC WORKS DEPARTMENT,

Heads of Service.	PROVINCIAL.				LOCAL.								
	GENERAL.				INCORPORATED.				EXCLUDED.				
	Original Budget Grant.	As modified after the issue of Budget Orders.	Expenditure.	Expenditure compared with Modification.	Original Budget Grant.	As modified after the issue of Budget Orders.	Expenditure.	Expenditure compared with Modification.	Original Budget Grant.	As modified after the issue of Budget Orders.	Expenditure.	Expenditure compared with Modification.	
													More.
Original Works ..	RS. 12,98,867	RS. 13,19,347	RS. 11,32,525	RS. 430	RS. 1,87,252	RS. 31,830	RS. 40,900	RS. 33,767	RS. 7,133	RS. 21,650	RS. 42,709	RS. 34,733	RS. 7,976
Repairs ..	1,37,383	1,98,092	1,86,659	..	11,433	17,510	29,956	28,939	1,017	..	8,438	9,516	1,078
Establishment ..	7,59,666	5,30,583	5,23,999	..	6,674	11,668	14,090	33,161	..	4,979	11,761	10,021	1,743
Tools and Plant ..	8,000	71,008	..	..	1,40,499	4,268	1,954	1,969	15	..	800	654	208
Profit and Loss ..	..	..	85,420	85,420	..	..	..	..	..	..	..	..	..
Suspense Balance.													
Stock ..	..	..	1,50,655	..	..	..	..	..	..	..	..	..	..
Stock Purchases and Sales ..	..	..	23,550	..	..	..	..	..	..	..	..	..	..
Miscellaneous Advances ..	7,300	9,970	31,730	21,760	..	..	..	..	..	..	..	..	..
London Invoices ..	..	..	7,950	7,950	..	..	..	..	..	..	..	..	..
Do. Stores ..	..	..	7,730	..	7,730	..	..	..	..	..	..	..	..
Grand Total ..	22,11,216	21,29,000	17,16,767	1,15,560	5,27,793	71,306	86,900	97,836	19,086	8,150	63,771	54,924	1,078
Surrender made to Government of India for which no details.		-6,00,000								26,954			9,925
Less Expenditure in England	..	..	..	..	..	..	..	..	..	..	..	..	..
Net Excess ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Net Saving ..	..	..	..	..	(b) 4,12,233	..	..	..	10,936	..	..	..	8,847

(a) Amount of Revised Estimate.

GENERAL AND BUILDINGS AND ROADS BRANCH.

No. II.—Statement showing Outlay under Funds, Departmental and Service Heads

Fund.	Class—Departmental and Service Heads.	Outlay.	Total.
		RS.	RS.
Imperial.	Military—		
	Original Works	2,48,365	
	Repairs	2,92,955	
	Establishment	1,11,767	
	Tools and Plant	7,221	
	Less Expenditure in England	...	
	Civil Buildings, Roads and Services—		6,60,308
	Civil Buildings—		
	Original Works	2,01,206	
	Repairs	5,099	
	Communications—		
	Original Works	...	
	Repairs	...	
	Miscellaneous Public Improvements—		
	Original Works	...	
	Repairs	...	
	Establishment	45,378	
	Tools and Plant	3,028	
	Less Expenditure in England	...	
	Madras Harbour Works—		2,54,711
	Productive Public Works—		
	Works	...	
	Establishment	...	
	Tools and Plant	...	
	Other Public Works—		
	Works	4,12,823	
	Establishment	56,243	
	Tools and Plant	2,334	
	Suspense Balance—		
	Stock	38,881	
	Stock Purchases and Sales	—13,233	
	Miscellaneous Advances	3,961	
	London Invoices	—2,440	
	Do. Stores	—488	
Provincial.	General—		4,98,081
	Civil Buildings—		
	Original Works	9,12,055	
	Repairs	1,44,569	
	Communications—		
	Original Works	1,55,966	
	Repairs	38,351	
	Miscellaneous Public Improvements—		
	Original Works	64,504	
	Repairs	5,739	
	Establishment	5,23,909	
	Tools and Plant	—69,491	
	Profit and Loss	85,420	
	Suspense Balance—		
	Stock	—1,50,655	
	Stock Purchases and Sales	—23,550	
	Miscellaneous Advances	31,730	
	London Invoices	7,950	
	Do. Stores	—7,730	
Local.	Incorporated—		17,16,767
	Civil Buildings—		
	Original Works	3,019	
	Repairs	...	

ADMINISTRATION REPORT OF THE PUBLIC WORKS DEPARTMENT,

Statement showing Outlay under Funds, Departmental and Service Heads.—*cont.*

Fund.	Class—Departmental and Service Heads.	Outlay.	Total.
Local— <i>cont.</i>	Incorporated—(<i>cont.</i>)—	RS.	RS.
	Communications—		
	Original Works	30,748	
	Repairs	28,446	
	Miscellaneous Public Improvements—		
	Original Works	...	
	Repairs	493	
	Establishment	33,161	
	Tools and Plant	1,969	
			97,836
	Excluded—		
	Civil Buildings—		
	Original Works	16,598	
	Repair	3,135	
	Communications—		
	Original Works	...	
	Repairs	...	
	Miscellaneous Public Improvements—		
	Original Works	18,135	
	Repairs	6,381	
	Establishment	10,021	
	Tools and Plant	654	
			54,924

No. III.—Statement showing Outlay compared with Grant under Departmental and Service Heads.

		IMPERIAL.									
		MILITARY.				CIVIL BUILDINGS, ROADS AND SERVICES.				MADRAS HARBOUR.	
Sub-heads.		Outlay.		Outlay compared with modified Grant.		Original Budget Grant.		Modified Grant.		Other Public Works.	
		Original Budget Grant.	Modified Grant.	More.	Less.	Original Budget Grant.	Modified Grant.	Original Budget Grant.	Modified Grant.	Original Budget Grant.	Modified Grant.
		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Military	..	2,17,524	2,48,365	..	46,035	2,36,353	1,78,800	2,01,206	2,01,206	1,00,000	4,12,823
Civil Buildings	..	..	..	..	..	..	..	..	..	..	..
Communications	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous Public Improvements	..	..	..	..	..	..	..	..	..	..	..
Total ..		2,17,524	2,48,365	..	46,035	2,36,353	1,78,800	2,01,206	2,01,206	1,00,000	4,12,823
Military	..	2,75,000	2,92,955	..	19,855	16,000	4,400	5,099	5,099	5,000	5,000
Civil Buildings	..	..	..	..	..	..	..	..	..	..	..
Communications	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous Public Improvements	..	..	..	..	..	..	..	..	..	..	..
Total ..		2,75,000	2,92,955	..	19,855	16,000	4,400	5,099	5,099	5,000	5,000
Establishment ..	..	1,15,126	1,11,767	..	3,333	58,010	42,150	45,378	45,378	60,836	56,243
Tools and Plant	..	12,350	7,221	..	179	6,308	2,750	3,028	3,028	10,000	2,334
Profit and Loss	..	..	..	..	..	..	..	..	..	..	..
Add net increase of Suspense Balances	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..		6,20,000	6,60,308	19,855	49,547	3,16,761	28,100	2,54,711	2,54,711	2,00,000	4,98,081
Less Expenditure in England	..	..	..	..	..	..	..	..	..	..	..
Net Total	..	6,20,000	6,60,308	19,855	49,547	3,16,761	28,100	2,54,711	2,54,711	2,00,000	4,98,081
Net Excess	..	..	..	..	..	..	..	..	..	..	..
Net Saving	..	..	..	..	29,692	..	..	..	..	..	..

GENERAL AND BUILDINGS AND ROADS BRANCH.

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STATEMENT showing Outlay on Works under each Fund distributed by Divisions with the Total Outlay on Establishment against each Division.

GENERAL AND BUILDINGS AND ROADS BRANCH.																	
Circle.	Divisions.	IMPERIAL.			OTHER PUBLIC WORKS.			PROVINCIAL.			LOCAL.			IRRIGATION.			
		MILITARY.		CIVIL BUILDINGS, ROADS AND SERVICES.	Original Works.		Repairs.	Original Works.		Repairs.	Incorporated.		Original Works.	Repairs.	Total.	Establishment.	Grand Total.
		Original Works.	Repairs.		Original Works.	Repairs.		Original Works.	Repairs.		Original Works.	Repairs.					
1st Circle.	Ganjam	RS. 129	RS. 3,552	RS. 413	RS. 536	RS. 19,277	RS. 4,181	RS. 78	RS. 2,377	RS. 8,447	RS. 39,181	RS. 24,141	RS. 63,322				
	Vizagapatam	..	6,697	..	347	..	2,238	..	302	..	11,109	..	2,36,975				
	Godavari Eastern	..	..	..	148	..	19,318	..	493	..	93,698	..	1,05,329				
	Do. Western	..	..	..	..	..	25,816	..	..	..	71,545	..	62,992				
2nd do.	Do. Central Division.	..	..	..	..	..	100	..	..	..	90,713	..	15,323				
	Kistna Eastern	..	..	..	140	..	..	..	..	..	15,205	..	623				
	Do. Western	..	..	..	..	..	2,934	..	2,029	..	51,992	..	1,73,761				
	Nellore	..	..	..	..	..	37	..	..	..	1,16,389	..	81,438				
3rd do.	Sungam Project Division.	..	..	..	..	..	5,025	..	59	..	26,481	..	59,804				
	Gudivada	..	..	..	..	..	..	..	..	..	4,01,946	..	4,01,947				
	Bellary	..	23,596	..	388	..	878	..	4,739	..	17,954	..	90,516				
	Cuddapah	..	..	..	143	..	5,529	..	..	..	23,790	..	36,267				
4th do.	Kurnool	..	..	..	..	..	3,052	..	135	..	3,883	..	25,286				
	Kurnool Canal.	..	..	..	..	..	2,678	..	4,347	..	8,451	..	21,730				
	C Project Division.	..	..	..	..	..	..	..	..	..	5,065	..	25,304				
	Nilgiri	..	..	..	..	..	..	..	..	..	1,76,295	..	1,77,032				
5th do.	Coimbatore	..	15,985	..	571	..	2,69,407	..	150	..	73,082	..	1,77,032				
	Salem	..	29,371	..	1,326	..	1,177	..	..	..	3,15,002	..	52,879				
	North Arcot.	..	6,941	..	701	..	68,884	..	6,535	..	80,485	..	77,810				
	B Project Division.	..	2,248	..	225	..	43,312	..	1,048	..	25,487	..	25,766				
6th do.	South Arcot	..	..	..	655	..	32,058	..	7,049	..	30,483	..	18,251				
	Chingleput	..	..	..	..	..	361	..	..	..	50,310	..	68,561				
	Buckingham Canal.	..	..	..	..	..	..	..	..	..	2,339	..	20,498				
	Presidency and Bangalore.	..	..	..	35	..	29,107	..	4,483	..	39,489	..	74,383				
6th do.	Trichinopoly	..	39,596	..	13	..	24,217	..	1,274	..	38,205	..	41,899				
	Tanjore	..	..	..	..	..	..	..	..	..	1,34,403	..	55,160				
	Negapatam	..	..	..	302	..	83,809	..	317	..	1,19,716	..	4,59,656				
	Madura	..	..	..	..	..	..	..	..	..	781	..	4,59,656				
6th do.	Trichinopoly	..	9,823	..	..	..	1,834	..	..	..	16,009	..	75,618				
	Tanjore	..	..	..	..	..	25,608	..	..	..	31,473	..	1,06,420				
	Negapatam	..	..	..	..	..	6,168	..	..	..	12,935	..	1,26,334				
	Madura	..	..	..	..	..	6,084	..	..	..	8,439	..	36,127				

Statement showing Outlay on Works under each Fund distributed by Divisions with the Total Outlay on Establishment against each Division--cont. 11

Budget Work

Fund.	Departmental and Service Heads.	RESERVE.		INCOMPLETE WORKS.		NEW WORKS.		Total Outlay, Columns 6 + 8.
		Budget.	Final.	Number.	Outlay.	Number.	Outlay.	
1	2	3	4	5	6	7	8	9
Imperial.	Military—	RS.	RS.		RS.		RS.	RS.
	Original Works	19,911	50,559	17	7,734	124	1,00,543	1,08,277
	Repairs	2,75,000	2,73,100	26	15,225	912	2,77,730	2,92,956
	Civil Buildings, Roads and Services							
	Civil Buildings—Postal—							
	Original Works	13,484	8,154	3	169	14	8,923	9,092
	Repairs	5,000	5,600	1	24	42	3,858	3,882
	Telegraph—							
	Original Works	6,452	2,452	..	..	1	112	112
	Repairs	3,000	3,000	1	— 39	7	898	859
	Salt—							
	Original Works	1,550	1,278	1	496	2	7,795	8,291
	Repairs	8,000	2,800	..	..	..	..	..
	Customs—							
	Original Works	..	..	..	..	..	..	..
Repairs	..	..	..	..	1	358	358	
Miscellaneous Public Improve- ments—								
Original Works	..	..	..	..	..	..	..	
Repairs	..	..	..	..	..	..	..	
Civil Buildings—								
Original Works	5,34,883	1,76,024	65	80,653	194	4,00,802	4,81,455	
Repairs	97,830	1,43,792	20	34,467	279	1,08,102	1,42,569	
Communications—								
Original Works	..	1,671	..	..	10	9,510	9,510	
Repairs	37,053	48,390	2	1,334	49	37,017	38,351	
Miscellaneous Public Improve- ments—								
Original Works	..	659	2	— 15	5	10,496	10,481	
Repairs	2,500	5,910	..	..	5	5,739	5,739	

IMPERIAL—MILITARY.

GODÁVARI EAST.—Lines for a detachment of Native Infantry at Sámalkót were completed at a total cost of Rs. 6,949, and the buildings handed over to the Military authorities.

BELLARY.—The water-supply project was in progress, and Rs. 2,394 were spent during the year. The revetment of the tank bank was raised 3 feet and the bank itself $6\frac{1}{2}$ feet above full tank-level. The total expenditure to the end of the year was Rs. 1,37,727 against an estimate of Rs. 1,41,628, and the work will probably be completed during 1883-84.

The construction of a Government Bakery was in progress, but the work was delayed by alterations in the design asked for by the Commissariat Department.

COIMBATORE.—The construction of barracks for a detachment of British Infantry at Malapuram was commenced, the expenditure to the end of the year having been Rs. 10,547 against a total estimate of Rs. 90,830.

SALEM.—The reconstruction of the Committee stand at the Remount Dépôt, Hosúr, at a cost of Rs. 2,464, and repairs to south and west sides of the stud lines at a cost of Rs. 3,993 were completed. Several minor original and repair works at the dépôt were also carried out.

NILGIRIS.—Additions to the hospital of the Girls' School, Lawrence Asylum, were completed at a total cost of Rs. 4,650. The work of providing kitchen ranges for married quarters at Wellington was in progress, and Rs. 6,200 were spent against an estimate of Rs. 8,020.

Masonry drains to the married quarters at the Wellington Barracks were improved and relaid at a cost of Rs. 1,552 against an estimate of Rs. 1,822.

The conversion of a portion of the existing cistern at the Lawrence Asylum was in progress.

Eight other minor new works were completed at Wellington and Lovedale. The building known as Bombay Castle, at Ootacamund, was purchased for Rs. 70,000 as offices for Army Head Quarters, and the repairs necessary to fit the building for occupation were in progress.

PRESIDENCY AND BANGALORE.—General repairs and improvements to the Body Guard Lines were carried out, the expenditure having been Rs. 14,935 against an estimate of Rs. 15,320.

Improvements to the Gunpowder Factory buildings were in progress and the construction of composition mills was commenced. The expenditure during the year on this work was Rs. 14,858.

The renewal of a portion of the terraced roof of the Grand Arsenal, Fort St. George, was partly completed, the expenditure having been Rs. 3,000 against an estimate of Rs. 4,940.

A sum of Rs. 61,600 was paid towards the purchase of the building known as the "Exchange House" in Fort St. George.

Additional married quarters for the European Non-Commissioned Officers of the Queen's Own Sappers and Miners at Bangalore were constructed at a cost of Rs. 5,214, and additions to the store-room of the same corps were made at a cost of Rs. 3,171. The construction of additional rooms to the Sapper School-buildings was in progress.

An Armourer's Shop costing Rs. 4,673, and a compound wall costing Rs. 4,166 were built for the parade barracks.

Quarters for a Staff Sergeant near the Public Cattle Lines were constructed for Rs. 2,924.

A sifting-room for the Government Bakery was completed at a cost of Rs. 3,721.

Dummy Railway wagons for purposes of practice were constructed for the Artillery and Cavalry at Bangalore at an expenditure of Rs. 2,799.

The outlay on Minor New Works at the Presidency and Bangalore amounted to Rs. 61,021, and on Repairs, including Barrack Master's petty repairs, to Rs. 1,50,789.

CHINGLEPUT.—Five blocks of the 30 family quarters at Poonamallee were completed, and foundations laid for two more blocks. The expenditure to the end of the year amounted to Rs. 28,885. When the two blocks are finished there will be 19 completed quarters, which number is considered by His Excellency the Commander-in-Chief to be sufficient for the future requirements of the dépôt. The total expenditure on the 19 quarters will be about Rs. 61,000 against the estimate of Rs. 82,300.

The new Royal Artillery Barracks at St. Thomas' Mount were in progress, and Rs. 19,677 were spent during the year.

Rs. 5,222 were spent on Minor New Works and Rs. 88,836 on Repairs.

IMPERIAL OTHER SERVICES.

NORTH ARCOT.—A new Post Office at Venkatigiri Cottah was completed at a cost of Rs. 1,466.

SALEM.—The Post Office at Yercaud was re-roofed with tiles in lieu of thatch, and the similar offices at Sooramangalum, Jalárpét, Yercaud and Vániyambadi were provided with iron bar revolving doors.

NILGIRIS.—The combined Post and Telegraph Office at Ootacamund was in progress, and an expenditure of Rs. 14,510 incurred against an allotment of Rs. 20,645, bringing the total outlay up to Rs. 32,745. The short outlay was owing to difficulty in procuring bricks. It is expected that the building will be completed and occupied in two months.

PRESIDENCY AND BANGALORE.—A revised estimate for the combined Post and Telegraph Offices at Madras, amounting to Rs. 6,05,536, was sanctioned, and the expenditure during the year amounted to Rs. 1,61,307, bringing the total outlay up to Rs. 4,26,410. With the exception of the higher parts of the work, the walling was completed, the south wing roofed in and the internal finishing commenced. The Post Office side was in rapid progress, but not roofed in. The timber work of the central hall was nearly all framed and raised. The progress of the work was seriously retarded owing to inadequate timber supply.

Additions and improvements to the Post Office at Bangalore were carried out at an outlay of Rs. 5,825 against an estimate of Rs. 6,068, one-third of the cost having been defrayed by the Mysore State.

SOUTH ARCOT.—A third revised estimate, amounting to Rs. 3,000, for a head-sludge to the Merkanam Brine Supply Channel was sanctioned, but owing to the late date of sanction and the difficulty of procuring materials but little progress was made on the work.

TINNEVELLY.—A Post Office at Srívaikuntham, costing Rs. 2,014, was nearly completed, and another at Vásudevanallúr was commenced.

MADURA.—Improvements to the Post Office at Ammayanáyakanúr were carried out; a seventh-class Post Office at Peermard was commenced, and the old Taluk Cutcherry at Periyakulam was repaired and converted into a Postmaster's residence.

PROVINCIAL—PRODUCTIVE PUBLIC WORKS.

MADRAS HARBOUR WORKS.—The total expenditure during the year amounted to Rs. 4,98,081. For further remarks, see "GENERAL OBSERVATIONS."

PROVINCIAL—CIVIL BUILDINGS.

GANJAM.—The work of converting the terraced roof of the Tahsildar's Cutcherry at Russellkonda into a tiled one was nearly completed, the expenditure during the year having amounted to Rs. 4,645.

The building known as "Onslow Court", at Chatrapur, was purchased for Rs. 12,000 as a residence for the Collector of Ganjam.

A wall was erected round the old general latrine in the District Jail at Berhampore, and the under-trial ward was re-roofed.

VIZAGAPATAM.—The following works were in progress:—

A Third-class Taluk Cutcherry at Párvatipur.

Police lines at the same station.

A bungalow for the Assistant Superintendent of Police at Jeypore.

Warders' lines and quarters for the Deputy Jailors and Head Constable at the Zillah Jail, Vizagapatam.

Fixing a lightning conductor to the Powder Magazine at Narsapatnam.

Accommodation for the segregation of violent patients in the Lunatic Asylum Waltair.

Sub-Registrar's Office at Srungavarapucottah and Chípapurpalle.

Buildings for the Special Assistant Agent at Koraput and the Sub-Registrar at Bimlipatam were purchased for Rs. 1,000 and 500, respectively.

GODÁVARI EAST.—The construction of a Police Head-quarters Office at Rajahmundry was in progress. The outlay during the year amounted to Rs. 10,450, bringing the total expenditure to Rs. 12,950 against an estimate of Rs. 16,060.

The following works were commenced:—

A Police Station at Addatigala.

Office and quarters for the Special Assistant Agent at Kunavaram.

Taluk Cutcherry and out-houses at Bhadráchalām.

Providing additional workshop accommodation in the Central Jail, Rajahmundry.

Water-supply and improvements to the drainage of the same jail.

Quarry Office at Dowláishweram.

GODÁVARI WEST.—The following works were commenced:—

Division Officer's quarters at Chettiput.

Sub-Magistrates' Cutcheries at Pattavaram and Pentapad.

Police Station-house at Ellore.

KISTNA.—A complete revised estimate, amounting to Rs. 34,845, for improvements to the Collector's Cutcherry at Masulipatam, was sanctioned, and materials were collected for a commencement of the work.

The work of converting the Nawab's bungalow at the same station into a District-house was completed at a total cost of Rs. 6,909.

The following works were in progress :—

- Divisional Office at Gudivada.
- Police huts for the guard at the Guntur Jail.
- District Munsif's Court at Bapatla.
- Divisional Office at Duggirala.

Improvements to the Guntur Jail were finally completed at a total cost of Rs. 36,764.

Improvements to the Sub-Magistrate's Cutcherry at Ponnur were nearly completed.

NELLORE.—The conversion of the old barracks at Ongole into a residence for the Sub-Collector was completed with the exception of a hedge and road. Expenditure Rs. 9,786.

A ryot's shed at Kandukur Sub-jail and a Town Police Station at Ongole were completed.

The following works were in progress :—

- District Munsif's Court at Kavalali.
- Sub-Magistrate's Cutcherry at Kota.
- Two new wards and an office at the District Jail, Nellore.
- A Sub-jail with out-houses at Allur and improvements to the bungalow for the Assistant Superintendent of Police at Ongole were nearly completed.

BELLARY.—A Registrar's Office was in progress.

KURNOOL.—A Forest Officer's bungalow at Nandyal was completed at a cost of Rs. 5,444.

CUDDAPAH.—The Taluk Cutcherry at Kadiri was completed. Expenditure Rupees 36,377.

NORTH ARCOT.—A Taluk Cutcherry at Walajapet and a residence for the Superintendent of Central Jail at Vellore were commenced.

The Sub-Magistrate's Cutcherry at Tirutani was completed at a total cost of Rs. 13,894.

COIMBATORE.—The following major works, commenced in previous years, were completed :—

District Munsif's Court at Udipi. Total outlay Rs. 9,428

Registrar's Office at Calicut. Total outlay Rs. 6,055.

Converting the late Sub-Divisional Office at Puttur into a Taluk Cutcherry and constructing a Sub-jail and latrine. Total outlay Rs. 8,916.

Head Assistant Collector's Cutcherry at Coondapoor. Total outlay Rs. 9,166.

Additions and improvements to the District Munsif's Court at Mangalore. Total outlay Rs. 7,341.

The following works were in progress :—

Additions to the Collector's Cutcherry at Mangalore. Expenditure Rs. 8,000.

District Munsif's Court at Tellicherry, Coondapoor and Puttur.

Additions and improvements to the Lunatic Asylum at Calicut. Expenditure Rs. 6,904.

Converting the general latrine attached to the District Jail at Calicut into a Debtors' Jail. Expenditure Rs. 3,174. Work nearly completed.

Registrars' Offices at Mangalore and Coimbatore, and Sub-Registrars' Offices at Tertolla, Karkal, Alatur and Coondapoor.

Improvements to the Taluk Cutcherry at Udipi.

Additions and improvements to the Police Head-quarters Office at Coimbatore were completed at a cost of Rs. 5,685.

The Brennen property at Tellicherry was purchased for Rs. 22,000 as a residence and office for the Sub-Collector.

Fourteen minor works were commenced and eight of them completed during the year.

SALEM.—A First-class Taluk Cutcherry at Dharmapuri was in progress and Rs. 20,029 were spent against an estimate of Rs. 27,050.

A District Munsif's Court at Tirupatūr was almost completed; the expenditure having been Rs. 12,491 against an estimate of Rs. 13,000.

A Sub-Magistrate's Cutcherry at Omalur was completed at an outlay of Rs. 9,000.

A First-class Police Station at Tirupatūr was constructed for Rs. 2,034.

A Second-class Police Station at Dowlatabad and Record-room to the Registrar's Office at Salem were in progress.

NILGIRIS.—The expenditure on Government House, Ootacamund, and subsidiary works during the year amounted to Rs. 1,10,677, bringing the total outlay up to Rs. 4,58,118. For further remarks see "GENERAL OBSERVATIONS."

Quarters for three married or six single Secretariat clerks were in progress.

Additions and improvements to the Secretariat Offices, Stonehouse, were also in progress, the outlay during the year having been Rs. 20,479 against an estimate of Rs. 45,552.

A sum of Rs. 1,076 was spent on repairs to "Crewe Hall," which was purchased for Secretariat clerks, and the building was occupied.

Three barracks for Sappers were commenced on an estimate of Rs. 21,760.

An additional room to the Collector's Cutcherry at Ootacamund was in progress.

Work on the Chinchona buildings at Naduvatam was continued, and Rs. 17,970 spent during the year, bringing the total outlay to Rs. 22,941.

The property known as Messrs. Brown and Co.'s bungalow at Pookote, near Vayitri, was purchased for Rs. 4,500 for a Telegraph Office, and a Telegraph Office at Devála was nearly completed.

A memorial to the Right Honorable W. P. Adam, late Governor of Madras, hewn from Palávaram granite, was under construction at Madras by the Consulting Architect. Only the cross and one of the principal mouldings remained to be completed. When finished the blocks will be transmitted to Ootacamund for erection in St. Thomas' Churchyard. The expenditure during the year was Rs. 3,801 against an estimate of Rs. 6,644.

PRESIDENCY AND BANGALORE.—Improvements to Government House at Madras, consisting of laying down Mosaic marble flooring, new teak-wood flooring in the drawing-room, and fitting up five satin-wood doors and decorating the south-east room on the first floor, were carried out at an expenditure of Rs. 11,993.

Ornamental enclosure walls along the eastern and western boundaries of St. Andrew's Kirk were in progress.

Alterations and additions to the Government Workhouse at Ráyapuram were completed at a total cost of Rs. 20,223.

Rs. 4,500 were spent on improvements to the Chepauk grounds.

The reconstruction of the roof of the infirmaries at the Monegar Choultry was completed at a cost of Rs. 5,645.

Two blocks of cottages, one for men and the other for women, were built at an outlay of Rs. 6,787, at the Lunatic Asylum, Madras.

Improvements to the Laboratory of the Chemical Examiner were commenced.

Thirty-nine minor new works were put in hand at Madras and thirty-eight completed; the total expenditure having been Rs. 11,778.

Ninety-six repair works at Madras and twelve at Bangalore were in progress.

The following works were carried out or in progress in the Consulting Architect's division :—

Medical School at the Monegar Choultry. Work completed at a total cost of Rs. 24,474.

New Picture Gallery at the School of Arts. This work, which was in progress during the previous year, was completed and decorated internally.

Improvements to the Museum of the School of Arts. Expenditure Rs. 11,856 against an estimate of Rs. 16,951.

Improving the large gallery of the Government Central Museum. Expenditure Rs. 5,822 against an estimate of Rs. 11,615.

Additions to the Ameer Mahal. Work commenced, the outlay having been Rs. 5,012. The estimate for this work amounts to Rs. 72,115, and it is intended to complete the buildings in 1884-85.

Additions to the Public Works Offices at Chepauk were commenced in January 1883, and rapid progress was made before the close of the year. Rs. 20,161 were expended against an estimate of Rs. 54,818.

A Record-room to the Public Works Accounts Office and a Verandah to the Government Lithographic Press were added at a cost of Rs. 6,276.

The parapets of Government House Bridge were provided with strong teak-wood railings and cut-stone terminations, at an outlay of Rs. 7,920.

CHINGLEPUT.—A District Munsiff's Court-house was built at Poonamallee for Rs. 10,347.

SOUTH ARCOT.—A new Taluk Cutcherry at Manjakuppam was completed at a cost of Rs. 16,189.

A subsidiary jail with out-houses at Mannargudi was finished with the exception of a well and asphalte work. Expenditure Rs. 5,752.

A new Taluk Cutcherry at Tiruvadi was in progress.

Materials were collected for a commencement of work on the Collector's Cutcherry at Cuddalore.

Improvements to the Head Assistant Collector's Cutcherry at Vriddhachalam were nearly finished, outlay Rs. 5,322.

A new Sea Custom House at Porto Novo and additions to the Sub-Collector's residence at Tindivanam were in progress.

TRICHINOPOLY.—The following works were in progress :—

A Taluk Cutcherry at Perambalur.

District Munsifs' Courts at Ariyalur and Kulitalai.

A Treasury room in the Collector's Cutcherry at Trichinopoly.

The "Heber Memorial" at Trichinopoly, consisting of an ornamental railing on a cut-stone base round the bath in which Bishop Heber was drowned, and improvements to the adjoining well, were nearly finished.

Police huts at Rungungudi were completed at a cost of Rs. 1,520.

TANJORE.—A Powder Magazine at Tanjore was almost completed, the expenditure having been Rs. 1,699.

A District Registrar's Office at the same station was constructed at a cost of Rs. 10,841.

A District Munsiff's Court at Triviar was in progress.

A room for a Sub-Registrar's Office was added to the Taluk Cutcherry at Shiyali at a cost of Rs. 1,271.

Rs. 2,066 were spent on a new Division Office at Tanjore against an estimate of Rs. 10,835.

The total expenditure to the end of the year on the new District Jail at Tanjore amounted to Rs. 18,275, the total estimate being Rs. 2,11,100.

A District Munsiff's Court at Mayavaram and additions and improvements to the Court-house at Tranquebar were in progress.

Repairs to the Tanjore Palace were continued, and the total outlay to the end of the year amounted to Rs. 57,965 against an estimate of Rs. 92,920.

Repairs to the Tiruvadamarudur Palace were nearly finished; total expenditure Rs. 7,991.

TINNEVELLY.—The expenditure during the year on the new jail at Palamcottah amounted to Rs. 30,780, bringing the total outlay to Rs. 1,25,337.

A Sub-Magistrate's Cutcherry at Virudupati was in progress.

MADURA.—Rs. 49,944 were spent during the year in connection with the restorative work at Tirumala Naick's Palace, bringing the total outlay to the end of 1882-83 to Rs. 2,01,962. For further remarks see under "GENERAL OBSERVATIONS" below.

A Sub-Collector's bungalow at Dindigul was completed by the Revenue Department at a cost of Rs. 8,605.

Improvements to the District Jail at Madura were carried out at an expenditure of Rs. 11,288.

A Sub-Magistrate's Cutcherry at Tiruvadanai and improvements to the Sub-Collector's Cutcherry at Dindigul were in progress.

NEGAPATAM.—The following works were in progress or completed :—

A Sub-Registrar's Office at Vadarniem.

• Adding a room to the Taluk Cutcherry, Patukota, for a Sub-Registrar's Office.

A Sub-Magistrate's Cutcherry at Arantangi.

Sub-Registrars' Offices at Negapatam, Tiruválur, and Tiruturai-pundi.

Extensions and improvements to the District Munsiffs' Courts at Tiruturai-pundi and Negapatam.

PROVINCIAL—COMMUNICATIONS.

VIZAGAPATAM.—The expenditure on the new Potinghi Ghât during the year amounted to Rs. 1,45,388. M^r. H. E. Clerk, Assistant Engineer, was placed in special charge of the work in April 1882, under the Executive Engineer of the Division, Mr. T. D. Harris, and the subordinate staff being also considerably increased, the progress was much more satisfactory than in any previous year. The work was visited by His Excellency the Governor, who, with his suite and several officials of the district, drove to Seneki (about half way up) and from there drove to Potinghi.

The casualties amongst the subordinate staff was regrettably large, three Overseers having died, and two Supervisors having had to leave the work from sickness.

A revised estimate for the ghât, amounting to Rs. 4,22,711, has recently been sanctioned, and the work is promised for completion early in 1884.

GODAVARI EAST.—Rs. 18,657 were spent during the year on the maintenance of the Navigation Works at Dumagudiem, and 803 boats and 152 rafts passed through the canal.

MADURA.—The Cumbum-Gudalur Road, and repairs to the Gudalur Ghât, the expenditure on which is being met from Provincial Funds, were in progress under the Local Fund Engineer.

PROVINCIAL—MISCELLANEOUS PUBLIC IMPROVEMENT.

NILGIRIS.—A sum of Rs. 37,773 was spent on improvements to the station of Ootacamund. For further notice see "GENERAL OBSERVATIONS."

PRESIDENCY.—Improvements to the South Beach Promenade, and the bridges on the Beach Road, were in progress, and Rs. 24,023 were spent during the year.

An expenditure of Rs. 2,634 was incurred on the conservancy of the Cooum River and in opening and closing the bar.

LOCAL—CIVIL BUILDINGS.

GODAVARI WEST.—A school-house at Viravásaram was completed at a cost of Rs. 3,930.

NORTH ARCOT.—Rs. 7,049 were spent to the end of the year on the Chittoor High School.

SALEM.—Additional accommodation to the Government Middle School-house at Tirupatúr was provided at a cost of Rs. 1,048.

TRICHINOPOLY.—A dispensary at Musiri was built for Rs. 3,019.

PRESIDENCY.—The central tower of the Presidency College was remodelled at a cost of Rs. 4,661.

LOCAL—COMMUNICATIONS.

GODAVARI EAST.—The expenditure during the year on the Covur-Munjair Junction Canal amounted to Rs. 20,473. The girder bridge under the Cocanada-Kollapilli Road was completed, and the Kurada Aqueduct nearly so.

TANJORE.—Rs. 12,554 were spent by the department in forming and repairing roads in this division.

GODAVARI QUARRIES.

The quantity of stone despatched from the Godavari Quarries during 1882-83 and the two previous years was as follows :—

	C. YARDS.
1880-81	22,881
1881-82	18,991
1882-83	27,185

The increase in the year under review was owing to the completion estimates of the Godavari Delta having been sanctioned.

PRESIDENCY PUBLIC WORKS STORES AND WORKSHOPS.

The opening balance of serviceable stock in store on the 1st April 1882 was valued at Rs. 4,71,840, or Rs. 1,335 in excess of the amount entered in the Administration Report for 1881-82. The excess was owing to credits afforded after the report was drawn up. The receipts from all sources during the year amounted to Rs. 50,038, which, with the opening balance, made a total of Rs. 5,21,878. The remains on the 31st March 1883 amounted to Rs. 3,63,065, or Rs. 1,08,775 less than the opening balance of the year. This large reduction was owing to a revision of rates ordered during the year.

The receipts were from the following sources :—

	RS.	A.	P.
From London	25,839	11	7
„ Civil Departments	400	9	4
„ Public Works Department	5,237	13	5
„ Public Works Workshops	13,027	0	7
„ Railways	294	11	0
„ Local Market	5,238	1	9
Total	50,037	15	8

and the issues were as under :—

	RS.	A.	P.
To Public Works Divisions	24,259	5	6
„ Presidency Workshops	22,999	2	6
„ Dowlaishweram Workshops	195	8	7
„ Telegraph Department	19	15	0
„ Civil Departments	3,341	9	3
„ Military Department	6,884	15	0
„ Native States	539	12	5
„ Railways	9,820	12	9
„ Municipalities	1,394	5	1
„ Local Fund Boards	9,696	7	5
„ Private parties	8,304	10	4
Reduction of rates ordered by Government	71,356	0	11
Total	1,58,812	8	9

The amount received from Government for the operations of the Workshops was Rs. 1,02,000 in cash and Rs. 28,053 in stores, making a total of Rs. 1,30,053, against which credits were afforded, by cash Rs. 34,712, and by book adjustments Rs. 1,04,992, or a total of Rs. 1,39,704. The advances made by Government were therefore more than repaid by Rs. 9,651.

For further remarks see “GENERAL OBSERVATIONS.”

PLANS AND PUBLICATIONS.

The following is a brief summary of the work turned out by the Government Lithographic Branch of the Chief Engineer's Office from April 1882 to March 1883 :—

Departments.	Amount.	Remarks.
General Branch, Public Works Department	RS. 2,849	A. 0 P. 9
Irrigation do. do.	2,569	5 10
Examiner, Public Works Accounts	12	12 0
Consulting Engineer for Railways	218	0 7
Secretary, Board of Examiners	30	0 0
Civil Engineering College	64	15 2
Sanitary Commissioner	442	0 0
Military Department	6	0 0
Public do.	911	5 0
Revenue do.	144	0 0
Board of Revenue	12	0 0
Adjutant-General	13	8 0
Marine Department	50	0 0
Quartermaster-General	3,125	2 7
Superintendent, Government Farm	37	12 9
Executive Engineer, D. Project	106	10 1
Salt Commissioner	221	6 5
Private Sources	*18	0 0
Grand Total Value of Work turned out	10,831	15 2
Working Expenses	11,026	7 3

Work turned out in 1880-81 .. 11,982 5 0
Do. 1881-82 .. 13,512 11 4
Do. 1882-83 .. 10,831 15 2
Average for 3 years .. 12,108 15 10

* This amount, received in cash, has been paid and remitted to the Executive Engineer, Presidency.

GENERAL OBSERVATIONS.

MADRAS HARBOUR.—Although the serious damage caused by the storm of 12th November 1881, put a stop to all progress towards completing the design of the Harbour, a considerable amount of work in the way of repairs, block-making and protecting the shore was carried on under the superintendence of Mr. N. St. B. Beardmore, who acted for Mr. Thorowgood during the latter's absence in Europe.

During the year under review 487 concrete blocks were made, measuring 8,589 cubic yards. At the north pier, which was left in a very precarious state by the storm above mentioned, the foot of the sea-wall was protected by throwing down large stone, obtained from Pallavaram quarries, of which 4,781 tons were so deposited. The top rows of blocks were at the same time clamped together by means of old rails, and the top of the pier was levelled up with concrete for a length of 1,813 lineal feet.

There were 323 clamps fixed in the blocks of the north pier.

At the south pier, the top blocks were clamped together with 396 clamps, and the surface was levelled with concrete.

The Pallavaram quarries were worked to a considerable extent during a part of the year, and 65,833 tons were sent down to the Harbour for various purposes. Of this amount, 47,623 tons were used entirely in protecting the shore to the north of the Harbour.

The sea continued to encroach to the north of the Harbour to a serious extent, and in spite of the protecting revetment. The land in the neighbourhood of the worst encroachments about Cassemode is being rapidly acquired by Government, and compensation has been paid to those who suffered loss by reason of the action of the sea. Rs. 97,686 were paid for purchase of land under these conditions and Rs. 98,078 for protective works, thus giving a total of Rs. 1,95,864 for this “Contingent” expense. The total cost of the protective works since the commencement has been Rs. 2,03,811 irrespective of what has been paid for land and for compensation.

The plant on the works has been overhauled and repaired, and the wrecks of the steamers *Hobart* and *Salisbury* have been entirely removed from the Harbour, the old material having been recovered by divers.

40 tons of English Portland cement were received on the works, and 995 tons of cement made in Madras. The latter has been of very excellent quality.

A complete set of sections of the two piers, taken at every 25 feet of their length, was made. These sections show in detail the existing state of the blocks, and involved some difficulty and danger in carrying out. A marine survey was also made by Mr. Beardmore from the lighthouse to nearly 3 miles north, and going out to sea for an average distance of a mile. The depths and contour lines on this survey show very accurately the condition of the roadstead and Harbour as regards deepening and shoaling.

Mr. Thorowgood, Superintendent, returned on March 8, 1883, from twelve months' leave, and on instructions from home, with the approval of the Madras Government, he at once stopped all work, except repairs to plant, and reduced the staff as much as possible.

At present the details of the design for restoring the damaged Harbour and resuming active operations are under consideration both in London and in Madras.

From the foregoing brief statement of progress it is needless to observe that owing to the future plan for completing the work not having been decided on, nothing more than measures calculated to secure, as far as possible, from immediate injury the straight portions of the north and south piers were attempted, added to the operations north of the Harbour, manufacture of concrete blocks to some extent for future work, &c.

The Home Committee, consisting of Sir John Hawkshaw, Sir John Coode, and Professor Stokes, to whom the question of the restoration of the works had been referred by the Secretary of State, submitted their report, under date 23rd January 1883.

They considered generally that the preferable plan would be to strengthen the straight portions running out from the shore by—

- (1) making up the rubble base where scoured;
- (2) tipping over the seaward faces concrete blocks so as to act as wave breakers;
- (3) clamping together the blocks of the existing portion of the piers, and covering the whole with a block of concrete so as to raise the top to 12 feet above the level of high water in ordinary spring tides.

For the seaward arms they recommended much the same system, only extending the width of the rubble base and of the wave-breaker composed of random blocks.

Further, they advised the narrowing of the eastern entrance from 550 to 450 feet to lessen the disturbance in the Harbour.

A certain latitude was given in reference to the details, and the Committee stated their opinion that the system of reconstruction by means of random blocks, which had been advocated by Mr. Molesworth and the Chief Engineer, would be "a safe system to follow."

On receipt of the above report the local Government appointed the following Committee to frame detailed estimates and generally to aid by their advice in arriving at a conclusion regarding the best method of prosecuting the work to completion, viz. :—

Colonel R. H. Sankey, C.B., R.E., President.	
Colonel J. O. Hasted, R.E.,	
Lieut. J. H. Taylor, R.N.R.,	
T. E. Marshall, Esq.,	
F. N. Thorowgood, Esq., M. INST.	} Members.
C.E.,	
N. St. B. Beardmore, Esq.,	
Major C. Bowen, R.E., Secretary.	

As the report presented by this local Committee, dated 20th June, is at present under reference to higher authority and appertains more directly to the year now current, it will suffice to observe that, by certain modifications of the suggestions of the Home Committee, and by adopting the random block system for restoration of the seaward arms, &c., they have shown the feasibility of giving Madras a still-water Harbour, capable of sheltering in safety vessels even during cyclone storms at an outlay not exceeding that estimated by Sir John Hawkshaw's Committee.

MANGALORE HARBOUR.—The new mouth which was opened for this port a sandspit a little to the south of a point opposite the Custom House, and which long time not only promised the best results, but was for several months used by boats with great advantage to the trade, showed signs of closing in January and February.

This closure occurred notwithstanding prolonged efforts made by crib-work and screens to diminish the draft towards the old mouth to the north, which it was hoped might thus in time close of itself.

On a visit made by the Chief Engineer and Master Attendant in last February, it was decided to suspend all operations and await the effects of the first heavy monsoon floods in the Netrávati River.

This decision was the more easily arrived at, as it was recognized that, owing to the abolition of Customs duties, there was not the same necessity as formerly for providing the most direct course between vessels in the offing and the Custom House.

In 1827, when the mouth was as far south as a point in direct line with the stream of the Netrávati River, it is understood that there was excellent anchorage for patimars in that river, and as a reversion to this state of matters would not be inconvenient for the trade of the port under the altered circumstances above adverted to, the mouth may now form as far south as it can.

The effect of a late heavy flood has as a fact opened a new mouth about 2000 feet wide in this direction at a point 400 yards south of that of last year, but it remains to be seen whether the draft towards it will suffice to close either of the northern mouths, and establish a sufficient depth of water on the bar.

CALICUT PIER.—The circumstances of this work were noticed at some length in last year's Administration Report. It was there shown that the capital outlay amounted to Rs. 73,000; that a large sum would be needed to put the pier in good working condition; that, setting aside all considerations of interest on the capital outlay on the work, the mere cost of the establishment entertained had never been repaid; and that the work existed solely in the interests of a few European firms, while the large amount of the native trade of the port could make no use whatever of the pier.

In consequence of this state of things and of strong representations from the European firms who were interested in the work, that they were quite assured of its remunerative character if properly dealt with, the Government, in last August, expressed their willingness to make over the pier to a company of merchants for maintenance, and in so doing to allot as a final contribution double the amount which might be advanced by the said company for the repair of the work.

The gentlemen who formed themselves into a company with the above object estimated the repairs at Rs. 12,000, and accordingly Rs. 8,000 were paid over from Port Funds, and a deed of conveyance on a ninety-nine years' lease was duly executed.

The future prosperity of this work, which had led to such long controversy, is now in the hands of those who consider that it can be made of real use to the port.

BEYPORE HARBOUR.—In the course of the year, as a result of the last monsoon which burst with unusual force on the West Coast, a question was raised in reference to erosions which occurred immediately south of Beypore, and at one time seriously threatened the Madras Railway line which is here carried close to the sea.

The erosive action, due no doubt to the abnormally heavy monsoon, and strong set of the ocean which accompanied it, was specially marked at Beypore, and short groynes of rough stone, which were at first thrown out in the hopes of maintaining the line of coast by the arrest of the travelling sand, failed to produce any sensible effect.

A longitudinal revetment of rough stone had to be undertaken, but before the work had been carried far, the action of the sea moderated, and though much mischief had already been done in destroying cocoanut gardens and part of a village, and in sweeping away the coast road, nothing has since occurred to cause apprehension for the line of railway.

It is hoped that with a succession of moderate monsoons the old shore line may yet become re-established, but nothing certain can be predicated.

After a full consideration on the part of Government it was decided that the expense of protecting the railway devolved on the company, and that the expense should not be debited to Provincial Funds.

PROPOSED PAMBAN SHIP CANAL.—As decided in the previous year, a survey and borings were carried out by the Port Officer at Pamban, Captain T. H. Ker, along the line crossing the Island of Ramesvaram, about a mile east of the existing canal, which it was understood had been originally selected by Sir W. Denison, and which, after personal examination of all alternative lines, had been recommended by the Chief Engineer and Master Attendant as being, in their opinion, the most feasible for a work of the kind, should it ever be undertaken.

The distance from high-water mark north to high-water mark south across the isthmus at this point was found to be 11,350 feet, the longitude of the line (almost directly north and south) being $79^{\circ} 14' 40''$ east. The ground (only a few feet above high-water level throughout) was found by borings to be chiefly composed of sand in various states of compactness, with a wavy stratum of sandy rock of no great thickness crossing the line from east to west and 3,000 feet in width.

So far as concerned the excavation of a canal through the isthmus thus composed there could be no serious engineering difficulties, but off the northern entrance is a coral reef 500 feet wide, which is nearly dry at low water.

At the south end of the proposed canal a depth of 30 feet is only reached at a distance of about 11,000 feet and at the north 6,000 feet.

The difficulties of excavating a canal of the needful depth for ships as thus shown, would be enhanced by those inseparable from the perpetual growth of coral which so frequently makes its appearance here and in the adjoining seas.

But there are graver objections in the small depth of water met with north of the canal in Palks Bay, as clearly proved by a careful examination made by the Master Attendant in last December.

After a careful survey of the shoals between Point Calimere and Point Pedro it was found that only two passages can be made available, neither of them, however, being fit for large vessels such as pass through the Suez Canal. One on the west side, opposite the Island of Elewa Tevoo, has $31\frac{1}{2}$ feet L.W., and the other on the N.E. opposite Tondiman has only $28\frac{1}{2}$ L.W. All vessels passing a canal through Ramesvaram would be compelled to make use of both. The depth necessary to enable a ship to pass with safety from and to open sea has been laid down by Sir John Coode at 40 feet, and during the heavy swells of the north-east and south-west monsoons that depth in so exposed a situation cannot be regarded as excessive. It is therefore obvious that heavy dredging for a channel of sufficient depth would have to be carried on before the canal can be availed of. The Madras Government were applied to by a firm in London through its Ceylon representative, Mr. Grindrod, for certain concessions to enable them to cut a ship canal through Ramesvaram. While offering no objection to the project, the Government felt bound to place the difficulties of the scheme clearly before the projectors; and accordingly communicated to them all available information.

CALINGAPATAM, BIMLIPATAM, AND VIZAGAPATAM HARBOURS.—As shown in last year's Administration Report, the opinion of Mr. Parkes, who was specially deputed to investigate the condition of these ports, and feasibility of undertaking Harbour works on a large scale, was decidedly averse to any such projects. Even as regards Vizagapatam, connected with which grand schemes had long been advocated in certain quarters, the opinion of this officer was opposed to any further action than that of endeavouring to improve the depth of water on the bar.

Hydrographic surveys of the several ports, having the object of collecting data on which, if possible, to improve them for boats, were commenced in the year under review.

At Bimlipatam, moreover, the construction of a groyne to shelter large boats has been commenced at an estimated outlay of Rs. 5,980.

COCANADA HARBOUR IMPROVEMENTS.—As far back as 1871 the Harbour Engineer, Mr. Robertson, who visited and reported on this port with others in the Madras Presidency, recommended the formation of parallel groynes to be run out northward in continuation of the Cocanada River, across the mud shoals (formed by the silt poured out from the Godavari River) to the anchorage, as also the dredging out of the channel between them. In 1880 an estimate was sanctioned for constructing tentatively two such groynes, respectively 500 and 700 feet long, and the result has been so

far satisfactory that in the year under review an estimate, amounting to Rs. has been sanctioned for extending the works.

A short Bill is likewise being passed through the Legislative Council to allow such moderate levy of port dues as will admit of the cost being covered by a sinking fund.

The measure has met with the general approval of all interested in the trade of the port, and there can be no question that the works now in progress will afford nearly all the relief that is required in the interests of the shipping.

TRAMWAYS.—The question of the provision of tramways or light railways in those parts of the country in need of such means of communication, more especially the famine zone of the Presidency, engaged considerable attention during the year; the various local authorities concerned being consulted as to the routes to be followed, the character of the lines, probable cost, and estimates of traffic receipts. Much information on this subject having been received, it was laid before the Government of India with an expression of the opinion of the Local Government that the best results would accrue from an extension, by means of light railways constructed on economical principles, of the existing main arteries. So far as the famine zone is concerned, it was pointed out that the necessity for cheap protective lines was forced on the attention of Government by the fact that in times of scarcity, and particularly during a grass famine, the ordinary means of transport by cart and bullocks is rendered extremely difficult, if not impossible, owing to the scarcity of fodder for cattle, great numbers of which perished in the last calamity. A scheme for adapting 1,000 miles of selected existing roads for the use of a very light system of rail and tramway combined within the famine zone was discussed, and a term of forty years named as the time required for completion. The Government are alive to the advantage of abridging this somewhat excessive period, and would be glad to see the project carried through much more rapidly, as notwithstanding the generally poor country through which the railways will be carried, it is not improbable that, owing to the economical style of construction recommended, the lines may prove to some extent remunerative. The matter was under the consideration of the Government of India when the year closed.

WYNAAD COMMUNICATIONS.—This important subject received such full consideration in the last Administration Report that a few words will now suffice.

After His Excellency the Governor's visit to Wynaad in January 1882 schemes of a very complete character were drawn up for consideration both in regard to roads and railways. Although only such lines for the former were selected as could be considered main arteries, the expense of bringing them up to such a standard as with the excessively heavy rains, peculiar formation, and soil of Wynaad, would stand monsoon traffic, the roughly estimated amount was shown by the Chief Engineer to be not less than $18\frac{1}{4}$ lakhs of rupees for 173 miles of road.

The proposed line of railway from the coast to ascend the ghâts and form a junction with the Mysore System was also shown to involve enormous outlay. The cost of opening up Wynaad in the sense of many of the advocates of the scheme, was thus demonstrated to be for the present beyond the means at disposal if the fair claims of other portions of the Presidency were to be allowed due weight, and the Government, on consideration of all the circumstances, found themselves obliged to limit themselves to carrying out with such assignments as it could afford—

- (1) the improvement of the road from Ootacamund *via* Naduvatam to Gúdálúr so as to render it in every way capable of sustaining monsoon traffic, and
- (2) the construction of a junction with the Mysore Railway from Gúdálúr to the frontier, whenever the former should be sufficiently advanced.

During the last and present years this policy has been steadily followed, and, so far as the road is concerned, it is hoped that in two years' time the line will have been brought up to very nearly as high a standard as that from Mettupálaiyam to Ootacamund.

As regards the railway, it is understood that the Mysore Government has decided to carry on their metre-gauge line to Nunjengode, and that this may ere long be extended to the Wynaad frontier near Tippicadu, when the connection with Gúdálúr may be arranged for by this Government.

Not admitting that much remains to be accomplished, the Government are of opinion that the work now in progress, when considered in connection with the heavy outlay which has been incurred in the construction of the three lines of ghāt roads connecting Wynaad with the coast, is all that could have been undertaken with the means at their disposal without neglect of equally pressing requirements in other parts of the Presidency. The importance of improving the communications in the Wynaad has, however, never been lost sight of, and active measures, having this object in view have recently been sanctioned; but as from the nature of the country, the paucity of labor, climate and other conditions, the cost is abnormally high, the perfection of the scheme must necessarily be a work of time, the more especially as the resources at the disposal of the Local Boards are such as to preclude those bodies affording any material aid to the undertaking.

IMPROVEMENTS AT OOTACAMUND.—An influential Committee assembled under orders of Government in 1881 submitted their report on the improvements which they considered to be essential for this Hill Station, which, in addition to being now the seat of Government during the hot season, is acknowledged to be the most important sanitarium in India for invalids, accessible alike to residents in Bengal and Bombay, as well as to those in the Madras Presidency.

On water-supply and drainage works held to be essential the Committee recommended an outlay of Rs. 4,90,000 and a like sum for remunerative and unremunerative improvements, including a new market, cattle and bandy-stand, slaughter-houses, &c., all of which are at present very defective.

The Government of India having on a previous occasion promised an amount as grant-in-aid towards constructing a proper main sewer, amounting to Rs. 74,000, in acknowledging the claims of the station to an Imperial grant, the Government submitted the proposals of the Improvement Committee again, strongly urging the claims of Ootacamund, and asked for a total grant including the above sum of Rs. 2,00,000, but were informed in reply that owing to the late decentralization orders no special grant of this character could be made.

Assistance from the Imperial Government having been thus negatived, such small assignments were made from Provincial Funds in the year under review as could be spared after meeting other pressing demands.

In all Rs. 75,000 were placed at disposal, Rs. 50,000 being assigned for constructing drains in the Main Bazaar, which was in an extremely insanitary condition, and the residue for buying out objectionable occupations, which it was considered quite hopeless to drain and improve.

This latter object has been fairly accomplished, as also some minor improvements; the bazaar drainage works have also advanced, and where carried out have proved to be a very material improvement.

The whole of this work should be completed in the current year, and if funds be available in the next year, the main sewer, which is a matter of the next importance, may be commenced.

The market scheme has likewise taken definite form, and may, it is hoped, ere long be carried into effect from loan funds.

On the whole a fair commencement has been made, which, if followed up, will effect changes of a very beneficial character; but owing to the poverty of the Municipality, and the many pressing and constantly increasing demands on Provincial Funds, it is doubtful whether the scheme as recommended by the Committee, however desirable and even necessary, can be carried out in its entirety.

GOVERNMENT HOUSE, OOTACAMUND.—Till the close of the year under review, and, in fact, till some time subsequently, it was found impossible to frame such an estimate as could be fairly considered to embrace all past and contemplated outlay on this work. The first estimates did not exhibit the cost of acquiring the old Norwood property on which Government House has been built, nor was accommodation for His Excellency's staff, servants, furniture, &c., adequately provided for. This has now, however, been done, and the estimate with designs submitted for the sanction of the Government of India.

IMPROVEMENTS TO THE CHEPAUK PARK, MADRAS.—In connection with the improvements to the South Beach promenade at Madras, the Chief Engineer brought forward

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proposals for gradually laying out and planting up as a park the Chempauk grō which are now placed the most important of the offices of Government. These commenced in the Governorship of Lord Napier, command, in many respects, an unrivalled site, and, though less costly than the corresponding Government buildings in the other Presidential capitals, are, it is thought, adequate.

In order to give these buildings the full advantage of the favorable position they occupy, it is only necessary to follow up the work already initiated by such small assignments as can, from time to time, be readily spared from Provincial Funds.

The cost of making the park drives as laid down on the plan which has been generally approved by the Government will not be great, and planting selected trees in groups, &c., only a work of time.

It is not too much to say that, if systematically worked out, Madras should have in time an extremely fine park around the chief offices of Government carried out moreover at such moderate outlay as will not, when spread over a series of years, be at all felt.

TIRUMAL NAICK'S PALACE AT MADURA.—The following work was done during the year:—

(a.) *Completing Restoration.*—The triplet arches in the openings of the colonade were restored. The overhanging and shaky parts of the old roof all round the colonade, verandahs north and south of dome A and north end of verandah between dome A and west colonade were dismantled; cornice and parapet wall round the colonade were built and the greater portion plastered. To this may be added a good deal of miscellaneous work which it is unnecessary here to detail.

(b.) *Civil Court-house.*—Has been in occupation by the Sessions Judge for the last nine months, but it remains to decide about the location of some of the offices, particularly that of the Collector, which have hitherto been unable to move into the restored Palace.

A good deal also remains to be done in providing the needful accessories for the several courts and offices, and in regard to water-supply and drainage.

The old huts which abut closely along two sides of the building have, moreover, to be removed and a proper esplanade formed.

These arrangements completed, as it is hoped they may be within the current year, the objects as originally contemplated by Lord Napier will, it is thought, have been very fully attained, and though the outlay will have been greater than was at first estimated, the results cannot be considered as otherwise than satisfactory, and as reflecting credit on the Consulting Architect, Mr. Chisholm, who from the outset has devoted continued attention to the restoration of this truly noble structure.

This is, however, not the place to attempt an account of the actual work that has been performed during the several years which the work of restoration has been in hand.

It will be understood that although by far the greater part of the old Palace has thus been restored, and will ere long be occupied by all the chief Government offices at Madura, some portions which are in a very ruinous condition will have been left practically untouched.

PRESERVATION OF NATIONAL MONUMENTS.—HAMPI.—As shown in previous Administration Reports, owing to the extensive character of the ruins, and the absence of skilled supervision, but little could be attempted towards the conservation of the old remains at Hampi, the ancient Vizianagara; but subsequent to the visit of Major H. H. Cole, R.E., Curator of National Monuments, late in 1882, Mr. H. C. Black, Temporary Assistant Engineer, was specially appointed for dealing with this and other monuments in Southern India, which still needed expenditure of public funds for their proper conservancy.

The Government of India placed at disposal Rs. 5,000 for the year's work, and the following operations were carried out at Hampi, commencing from the 15th December 1882.

The thick jungle that had overgrown the ruins was completely cut down, and the roots of the trees which were damaging the buildings by displacing the stones were exterminated. As the roots extended into the masonry, under and between very large

destroying the wood by some chemical means. Sulphuric acid has been tried in some places and found to burn the top, only, of the wood, without affecting the lower part. Mercury has therefore been tried in this case, and apparently with success, almost all the roots to which it has been applied having withered.

One hundred and ten of the temples and other buildings have thus been cleared of jungle.

The conservation of the most beautiful of the temples, Vettali Swami, has been commenced. A great portion of the stone roof was in a most dangerous state. This has been removed and the whole building cleared from both fallen debris and from a large number of unsightly additions and alterations which had been made at different times. These additions were very extensive, the central hall having been filled, partly with earth, and afterwards short granite posts and brick walls erected, to support the damaged roof.

Almost all the outside walls were much out of the perpendicular, and threatened to fall; in fact, a considerable portion of the outside casing of carved granite had already fallen. The insecure portions have been taken down as far as the ground level and are being rebuilt. None of the carved granite facing was missing, as the stones lay on the ground where they had fallen.

Stone beams and columns have been selected from amongst the debris of the many fallen temples to supply the place of those at Vettali Swami, which have been so damaged by fire and decay as to be irreparable, and will be erected during the current season.

AMARAVATI.—The most valuable of the Buddhist remains at this place, consisting of sculptures, were, under the advice of Dr. Burgess, packed for removal to the Museum at Madras, where it is intended that they shall be placed on view, photographed, and casts taken if required. The remaining sculptures will be preserved at Amaravati.

SEVEN PAGODAS.—Mr. Black subsequently undertook to complete further works of conservancy at the Seven Pagodas in addition to those carried out previously by the Public Works Department, but the account of these operations will fall into next report.

PALACE OF CHANDERNAGIRI.—No decision has yet been arrived at in regard to the precise character of the work of restoration to be carried out in connection with this ancient building, and its adaptation to public offices.

PUBLIC WORKS WORKSHOPS, MADRAS.—Effect has been given during the year to the contemplated arrangements for restricting the operations of the shops and reducing the establishment. It was decided to confine work to such repairs and trifling matters of manufacture as Executive Engineers cannot have locally executed; the requisite buildings and plant for this object being retained, but the rest disposed of. No adequate tender has, however, yet been received for the purchase of the property. Enquiries were made as to whether the mathematical instrument work of the department could be done either locally or at Calcutta. The result has so far not been quite successful. The instrument shop is therefore kept up for the present for the execution of Government work. Private work at the shop is not encouraged.

MINOR IRRIGATION WORKS.—It is needless to say that the unsatisfactory condition of the Minor Irrigation Works of the Presidency has, for a long series of years, been a source of discussion and of no small anxiety to Government; the subject had, moreover, not unnaturally attracted the serious attention of the Famine Commission.

As the means for dealing with the question in any comprehensive manner mainly depended on financial considerations, opportunity was taken of the presence of the Finance Member of the Viceroy's Council, the Honorable Major Baring, at Madras last November, to discuss the subject.

A scheme has, as the result of the conference, been placed before Government with the following objects:—

- (1) to bring up the tanks throughout the country to the proper standard of efficiency, providing weirs and sluices, where these are wanting or defective;
- (2) to maintain in future the works when thus brought up to the proper standard.

As a general guide it has been assumed that including second crop the average of wet land averages 6 rupees per acre, and that 8 per cent. on this, or 8 annas per acre, would furnish an approximate guide to the total charge for the contemplated improvements.

At this average the latter would amount to about 440 lakhs, or, adding one-fourth for Establishment and Tools and Plant, to 550 lakhs.

In their disposal, Public Works letter, No. 40 I., dated 26th June 1883, the Government of India have given their approval to the proposals thus briefly noticed, and with this object have decided that the grants under 33, Irrigation and Navigation for this Presidency, will be provided to the following extent:—

	RS.
1883-84	19,78,300
1884-85	21,28,300
1885-86	22,78,300
1886-87	25,28,300

As the amounts here stated include all grants for irrigation works, exclusive of those classed as "Productive," the practical result is that in the current official year 1½ lakhs should be devoted to the special work of improving the Minor Irrigation Works, and that successive increments of about the same sum will be made in each succeeding year, according to the ability of the department to undertake the work, till a certain maximum has been attained.

The sums adverted to will, moreover, leave untouched the assignments previously made for the ordinary repairs of tanks and channels, the work connected with which will go on irrespective of that connected with the improvement scheme.

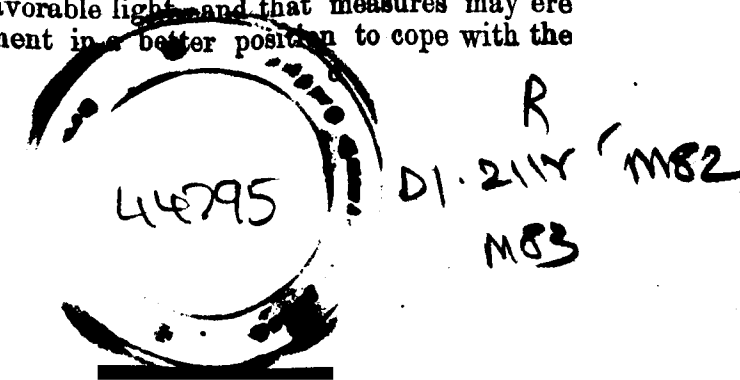
NORMAL STRENGTH OF THE DEPARTMENTAL ESTABLISHMENT.—In the previous year the scale of establishment had been raised (omitting Chief Engineers) to 6 Superintending Engineers, 36 Executive and 47 Assistant Engineers, with 185 Upper Subordinates; but in sanctioning this increase, the Government of India drew attention to what appeared to be the extravagantly large percentage of the cost as compared with that of other Provinces.

In reply it was brought under notice that, setting aside the fallacious test of percentage cost of establishment, owing to the wholly different character of the work devolving on the department from that in other Provinces, the apparently high percentage was due to the manner in which, under the rules of the Government of India, the charge for establishment was exhibited in the Examiner's accounts respectively against Imperial and Provincial Works. Under this system Imperial, Irrigation, Military, and other works was debited with a very small charge, leaving Provincial to bear an unduly heavy burden. While the Secretary of State was under the impression that the charge against Works Outlay was 84.4 per cent., it was shown that were the charges distributed equally over all heads of service, it would not exceed 20 per cent. So far from the establishment being costly, as compared with other Provinces, the reverse was clearly shown to be the case.

What was of much greater importance, proof was given that owing to the inadequate scale of establishment, it was impossible to devote the needful attention to the irrigation works on which not only the revenue and general prosperity of the Presidency depended, but which must be regarded as the greatest safeguard against famine.

In the opinion of the Revenue Officers of Government it was estimated that extensive areas of land, which, were the works in proper order, should be under irrigation and bear wet assessment, had all along been thrown out of cultivation from the neglected condition of the tanks and channels. The losses in this respect were estimated at 40 lakhs per annum and the aggregate in the last eighteen years not less than 7 millions sterling.

The Government of India, in reference to the state of matters thus brought prominently under notice, deputed Colonel H. Brownlow, Inspector-General of Irrigation Works, to inquire carefully on the spot as to the validity of the representations, and although no decision has as yet been arrived at, it is understood that the demands put forward have not been viewed in an unfavorable light, and that measures may ere long be sanctioned for placing the department in a better position to cope with the



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responsibilities that, with altogether inadequate means, it has hitherto been to accept.

EXECUTIVE CHANGES.—Owing to the numerical weakness of the permanent scale of the Department for meeting the requirements of sanctioned works certain of the Project Divisions which had been provided for in the last reorganization could not be fully officered throughout the year, and the work had in some cases to be held in abeyance. Proposals were made to the Government of India having in view the formation of Temporary Divisions for carrying into execution large projects in certain parts of the Presidency and the following were sanctioned :—

Central Godávári Division.

Gudiváda Division.

Cauvery and Veunár Regulator Division.

To start these divisions, officers of the permanent establishment have had to be posted to them, but it will in all probability be possible, under subsequent orders from the Government of India, to appoint additional *temporary* Engineers to these divisions, or, where this is impracticable, to replace, by temporary officers, the permanent staff absorbed by the new divisions. The strain hitherto most severe on the permanent establishment will thus be relaxed. Progress was also made with the work of the Tank Division, and this with the Rushikulya Project Division will, it is hoped, before long be sufficiently officered, but the operations of these will be more fitly noticed in the following year's review.

CIVIL ENGINEERING COLLEGE CURRICULUM.—Though this subject has received much special attention, it has not as yet been found feasible to introduce the alterations considered to be desirable.

With the profession of engineering, it is clearly essential to lay quite as much stress on imparting instruction on its practical side as in regard to pure theory.

Workshop training either before entry on the theoretical course, or as part of the course, can be given by making use of the railway and other shops; but to impart practical acquaintance in other no less essential branches of the profession, is by no means an easy matter.

The whole question has, however, arrived at a stage which it is thought will admit of its early and final disposal by Government.

APPOINTMENTS TO THE ENGINEER ESTABLISHMENT FROM THE CIVIL ENGINEERING COLLEGE.—By Resolution No. 241-51 G., dated 14th February 1883, of the Government of India, it was laid down that appointments to the Engineer Establishment from Indian Civil Engineering Colleges should be reserved for persons of pure Asiatic origin, who should qualify according to the college standard; if, however, a sufficient number of natives did not qualify, the appointments would be open to European and Eurasian competitors at the same examination. One such appointment was to be guaranteed to the Madras College for 1885 and another for 1886. Appointments to the Subordinate Establishment were to remain as heretofore open to Non-Commissioned Officers and Soldiers of the British Army and to Europeans and persons of mixed descent as well as Natives.

Memorials from Upper Subordinates who considered themselves debarred from promotion to the Engineer Establishment by the above Resolution were submitted and forwarded to the Secretary of State through the Government of India, but in reply the Government of India, while expressing their willingness to forward the memorials in question, and further to admit qualified Upper Subordinates to the position of Temporary Assistant Engineers, pointed out that the advancement of men of this class to permanent positions in the Engineer Establishment is now unnecessary and on other rounds undesirable.

HONORARY ASSISTANT ENGINEERS.—By Resolution No. 782-800 G., dated 1st June 1882, the Government of India ruled that, in view to improve the status of serving Civil Upper Subordinates, the distinction of Honorary Assistant Engineer might be conferred on 6 per cent. of the total number of men of this class in the grades Sub-Engineer; the persons so promoted being borne as substantive on the lists of Upper Subordinates. The ruling was also made applicable to the Accounts Branch.

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Under these orders the following Upper Subordinates were selected by the Government as worthy recipients of the distinction, viz. :—

To Honorary Assistant Engineer, 1st Grade.

Mr. S. Ottmann	...	...	...	...	Sub-Engineer i.
" J. Ellis	...	...	...	...	Do. i.
" W. Baker	...	...	...	...	Do. i.

To Honorary Assistant Engineer, 2nd Grade.

Mr. J. H. Stephens	...	...	...	...	Sub-Engineer ii.
C. Mahomed Casim Saib	...	...	...	...	Do. ii.

To Honorary Assistant Examiners.

Mr. E. Anthony	...	...	...	...	Accountant, 1st Grade.
" M. H. Gaynor	...	...	...	...	Do. do.

APPOINTMENT OF SURVEYORS.—In connection with the formation of the four Project Divisions as sanctioned in the permanent scale for the establishment of this department, the Government of India was asked to sanction the following nomenclature for permanent grading, viz., of 16 men of this class :—

					RS.
Surveyors, 1st Grade, each	...	...	...	...	200
Do. 2nd do.	...	...	...	...	150
Do. 3rd do.	...	...	...	...	100
Do. 4th do.	...	...	...	...	80

No travelling allowances except in cases of transfer.

In their reply, No. 61 G., dated 9th January 1883, the Government of India declined to sanction the appointments to the permanent scale and directed the appointments already made of eight men to be cancelled. Such subordinates are now therefore as appointed brought on the temporary establishment.

PUBLIC WORKS CODE.—As noticed in the last year's Administration Report, the new entirely revised edition of the Code has been issued with the book of Forms. For the future nothing further will be found necessary than to keep the work posted to date by the timely issues of standing orders. From the complete re-arrangement which has been made of the text, bringing the whole matter into logical sequence, the insertion of new orders on all subjects relating to the Government and working of the department is a matter of comparative ease.

EXPENDITURE.—The original grant under Provincial was Rs. 22,11,216. This amount was reduced during the year to Rs. 21,29,000, and in determining the amount of the Revised Estimate near the close of the year a further reduction of Rs. 6,00,000 was made. The Revised Estimate thus amounted to Rs. 15,29,000. The outlay amounted to Rs. 17,16,767, or Rs. 1,87,767 in excess of the Revised Estimate. The surrender of Rs. 6,00,000 from the Provincial Grant was, owing to the emergency of the demand, made in a lump sum without reference to details.

APPENDIX.

List of Major Works under Imperial undertaken during the Year 1882-83.

ADMINISTRATION REPORT OF THE PUBLIC WORKS DEPARTMENT,											
Division.	Work.	Main Head.	Estimate.	Outlay to end of previous year.	Outlay during year reviewed.	Total of Columns 5 and 6.	Allotment during year reviewed.	More than Allotment.	Less than Allotment.		
1	2	3	4	5	6	7	8	9	10		
	<i>Military.</i>										
Chingleput	Constructing a new barracks for Royal Artillery at Saint Thomas' Mount	(1) Accommodation for Troops.	1,30,370	17,672	19,677	37,349	21,834	..	2,157		
Bellary	Constructing stables for one Field Battery	Do. ..	..	..	7,183	7,183	7,530	..	347		
Chingleput	New double storied barracks for 200 men with out-houses. 1,66,885										
	New quarters for 30 families with out-houses										
	New quarters for Apothecary										
	Alterations to existing buildings and demolitions										
	Deduct value of old materials at Poonamallee	Do. ..	2,70,457	22,104	28,885	50,989	28,885	50	..		
	2,74,762										
	2,70,457										
Do.	Constructing a new hospital at Poonamallee	Do. ..	1,02,000	98,572	— 50	98,522	..	..	50		
Coimbatore	Barracks for a detachment of British Infantry to accommodate 100 men at Malapuram	Do. ..	90,830	..	10,547	10,547	11,000	..	453		
Do.	Providing a boarded floor for the hospital, European Infantry, at Cannanore	Do. ..	5,570	..	364	364	1,000	..	636		
Bellary	New pattern punkahs for half a battalion of British Infantry at Bellary	Do. ..	5,000	..	3,025	3,025	3,242	..	217		
Presidency	Completion of compound wall round Parade Barracks at Bangalore. ..	Do. ..	4,000	..	4,166	4,166	4,000	..	166		
Do.	New Armourer's shop for Parade Barracks at Bangalore	Do. ..	4,670	..	4,673	4,673	4,670	..	3		
Do.	Purchase of Exchange House used as an Officers' Mess of the European Infantry barracks at Fort St. George	Do. ..	80,000	..	61,600	61,600	61,600	..	..		
Nilgiri	Supplying cooking stoves to each married quarter at Wellington ..	Do. ..	8,020	..	6,200	6,200	6,000	..	200		
Do.	Extending the 6-inch water main pipe from the barrack square to the married quarter at Wellington	Do. ..	9,530	..	98	98	500	..	402		
Godavari Eastern.	Lines for a detachment of Native Infantry at Samalkot	Do. ..	7,005	3,437	3,512	6,949	3,568	..	56		
Presidency	Additional married quarters for European Non-commissioned Officers, Queen's Own Sappers and Miners, at Bangalore	Do. ..	5,240	..	5,214	5,214	5,240	..	26		
Do.	Addition to the store-room of the Sappers and Miners at Bangalore. ..	Do. ..	3,020	..	3,171	3,171	3,020	..	151		
Do.	Improvements to the Body Guard lines, Madras	Do. ..	15,320	..	14,935	14,935	15,320	..	385		
Do.	Additions to regimental school, Sappers and Miners, at Bangalore. ..	Do. ..	2,500	..	1,500	1,500	1,500	..	..		
	Improvements to the gun-powder factory and constructing commission mills, &c., at Madras (Valsarpaddy)	(2) Ordnance Works.	2,24,105	1,83,879	14,858	1,98,737	14,455	403	..		
Do.	Renewing a portion of terraced roof of the armoury of the Grand Arsenal, Fort St. George	Do. ..	4,940	..	3,000	3,000	2,000	..	..		
Bellary	Converting the east wing of the old Infantry barracks into a Government bakery	(3) Commissariat Buildings.	7,350	..	7,384	7,384	7,400	..	16		

GENERAL AND BUILDINGS AND ROADS BRANCH

Do. Presidency	Slaughter-house and hanging shed at Bellary	Do. ..	7,210	..	603	603	600	3	..		
Do. ..	Quarters for a Staff Sergeant at or near the public cattle lines at Bangalore	Do. ..	2,930	..	2,924	2,924	2,930	..	6		
Do. Nilgiri	Constructing a shifting room for the Government bakery at Bangalore	Do. ..	4,240	..	3,721	3,721	4,240	..	519		
Do. ..	Additional hospital accommodation at the girls' school attached to Lawrence Asylum, Ootacamund	(4) Staff and Miscellaneous.	4,800	401	4,249	4,650	4,800	..	551		
Do. Bellary	Water-supply Project	7. Gl. Cantonment Works.	1,41,628	1,35,333	2,394	1,37,727	2,458	..	64		
Do. Presidency	Improvements to the Dungaloor Tank, Bangalore	Do. ..	3,130	3,048	60	3,108	..	60	..		
Do. Chingleput	Constructing a drain for sewage, parallel to old and new Royal Artillery barracks, St. Thomas	Do. ..	3,376	782	— 21	761	..	..	21		
Do. Buckingham Canal.	<i>Civil Buildings, Roads and Services.</i>										
Do. ..	Constructing a groyne of piles and sand bags at Ennore	Civil Buildings.	4,620	..	4,596	4,596	4,600	..	4		
Do. ..	Opening and maintaining Ennore bar	Do. ..	2,500	..	105	105	1,000	..	895		
Do. ..	Do. Covelong bar	Do. ..	10,000	..	5,259	5,259	5,260	..	1		
Do. ..	Purchasing Octagon Bungalow from Messrs. Binny and Company at Ennore	Do. ..	4,000	..	4,000	4,000	..	4,000	..		
Do. South Arcot	Constructing a head sluice with screw gearing shutters across the Mercanum brine supply channel on the road from Mercanum to Thambakam	Do. ..	3,000	483	496	979	1,517	..	1,021		
Do. Architect	Constructing a Post Office at Madras	Do. ..	3,13,788	85,948	106,629	1,92,577	1,06,000	..	243		
Do. Nilgiri	Additions to Post Office at Bangalore	Do. ..	6,068	..	5,825	5,825	6,068	..	..		
Do. ..	Combined Post and Telegraph Office, Post Office at Ootacamund ..	Do. ..	17,880	3,865	3,865	3,865	10,000	..	6,135		
Do. Nilgiri	Constructing a Telegraph Office at Madras	Do. ..	2,91,748	1,79,155	54,678	2,33,833	54,000	..	..		
Do. ..	Combined Post and Telegraph Office, Telegraph Office at Ootacamund	Do. ..	28,880	18,235	10,645	28,880	10,645	..	..		

List of Major Works under Provincial undertaken during the year 1882-83.

Division.	Work.	Main Head.	Estimate.	Outlay to end of previous year.		Total of Columns 5 and 6.	Allotment during year reviewed.		More than Allotment.	Less than Allotment.
				4	5		7	8		
1	2	3	4	5	6	7	8	9	10	11
North Arcot	Constructing a Taluk Cutcherry at Wajahpet ..	Civil Buildings.	29,800	..	14,638	14,638	16,000	..	1,372	..
Do.	Constructing a Sea Customs Office with out-house at Porto-Novo ..	Do.	3,020	..	2,654	2,654	1,935	..	659	..
Do.	Constructing a Second-class Taluk Cutcherry at Tiruvadi ..	Do.	11,010	..	7,301	7,301	10,010	..	2,699	..
Do.	Taluk Cutcherry at Manjakkuppam ..	Do.	17,380	9,999	6,190	16,189	6,000	..	190	..
Do.	Improvements to the Head Assistant Collector's Cutcherry and out-houses at Vriddhachalam ..	Do.	..	2,253	..	5,322	3,507	..	438	..
Do.	Providing additional accommodation for the Sub-Collector at Tiruvannam ..	Do.	..	..	1,535	1,535	1,000	..	535	..
Do.	Additions to the Collector's Cutcherry at Cuddalore ..	Do.	5,835	..	1,506	1,506	1,000	..	..	..
Chingleput	Government House furniture charges at Gunday ..	Do.	8,528	..	1,000	1,000	1,000	..	..	..
Do.	Purchase of Miss O'Brien's bungalow for a Cutcherry for the Sub-Collector of Chingleput ..	Do.	..	3,000	..	4,500	1,500	..	6	..
Presidency	Government House furniture charges, Mount Road ..	Do.	..	..	3,005	3,005	3,000	..	..	..
Do.	Laying mosaic marble floor, &c., in certain rooms and verandahs of Government House at Madras ..	Do.	19,253	..	11,993	11,993	12,280	..	287	..
Nilgiri	Government House furniture charges, Ootacamund ..	Do.	..	..	1,000	1,000	1,000	..	..	..
Do.	Purchasing and repairing Crew Hall bungalow with out-houses, and providing furniture so as to accommodate eight Government Office Clerks, Ootacamund ..	Do.	..	..	..	..	..	..	..	..
Do.	Government House, Ootacamund, with additions and improvements ..	Do.	10,690	10,254	..	11,330	1,076	..	..	..
Do.	Additions and improvements to the Government Secretariat Office, Ootacamund ..	Do.	5,39,861	3,47,441	..	4,58,118	1,33,761	..	23,084	..
Do.	Shed-house, and a new road approach, Ootacamund ..	Do.	45,522	..	20,479	20,479	20,000	479	..	..
Do.	Additions and improvements to the Collector's Cutcherry at Ootacamund ..	Do.	4,766	..	1,271	1,271	4,766	..	3,495	..
Do.	Constructing quarters for three married clerks of the Secretariat at Ootacamund ..	Do.	21,914	..	7,170	7,170	7,500	..	330	..
Coimbatore	Converting the late Sub-Divisional Office into a Taluk Cutcherry and constructing a Sub-Jail and Latrine at Puttur ..	Do.	8,340	4,863	..	8,916	4,340	..	287	..
Do.	Constructing Cutcherry with out-houses for Head Assistant Collector at Coondapoor ..	Do.	..	8,212	..	9,166	474	..	..	..
Do.	Making certain additions to the Collector's Cutcherry at Mangalore ..	Do.	8,685	29,370	..	8,000	8,000	..	480	..
Do.	Improvements to the Taluk Cutcherry at Udipi ..	Do.	4,500	..	714	714	2,000	..	1,286	..
Godavari	Purchase of the Brennen property in Tellicherry ..	Do.	22,000	..	22,000	22,000	22,000	..	..	..
Do.	Constructing office and quarters for Special Assistant Agent at Kunavaram ..	Do.	9,600	474	..	4,887	6,000	..	1,587	..
Do.	Constructing a Taluk Cutcherry and out-houses at Bhadrachalam ..	Do.	7,500	..	3,604	3,604	5,000	..	1,396	..
Kistna Eastern.	Improvements to the Collector's Cutcherry at Masulipatam ..	Do.	34,845	..	2,396	2,396	2,500	..	104	..
Salem	Taluk Cutcherry at Dharmapuri ..	Do.	27,050	..	20,029	20,029	20,000	..	29	..
Do.	Deputy Tahsildar's Cutcherry at Omalur ..	Do.	9,637	..	9,089	9,089	9,637	..	548	..
Trichinopoly	First-class Taluk Cutcherry at Perambalur ..	Do.	27,000	..	10,860	10,860	8,000	..	2,860	..
Vizagapatam	Constructing a treasury-room in the Collector's Cutcherry at Trichinopoly ..	Do.	3,760	..	1,618	1,618	1,000	..	618	..

GENERAL AND BUILDINGS AND ROADS BRANCH.

Division.	Work.	Estimate.	Outlay to end of previous year.	Total of Columns 5 and 6.	Allotment during year reviewed.	More than Allotment.	Less than Allotment.
1	2	3	4	5	6	7	8
Ganjam	Converting the terraced roof of the Tahsildar's Cutcherry into tiled one at Russelkonda ..	5,128	6,000	4,645	4,670	25	..
Madras	Sub-Collector's Bungalow at Dindigul ..	8,355	..	2,605	2,605	..	..
Do.	Improvements to the Sub-Collector's Cutcherry at Dindigul ..	2,600	..	2,241	2,350	109	..
Cuddapah	Taluk Cutcherry and out-houses at Kadiri ..	37,833	34,289	2,088	36,377	410	..
Do.	Taluk Cutcherry at Madanapalle ..	32,218	31,869	171	32,040	..	171
Do.	Sub-Collector's Cutcherry at Madanapalle ..	14,895	30	729	759	271	..
Bellary	Taluk Cutcherry at Harpanahalli ..	26,715	2,022	9	2,031	9	..
Vizagapatam	Sub-Magistrate's Cutcherry at Tiruvadani ..	11,785	..	5,332	5,332	..	..
Godavari	Constructing a Third-class Taluk Cutcherry at Parvatipur ..	7,200	..	3,635	3,635	..	..
Do.	Third-class Taluk Cutcherry at Pentapad ..	..	..	..	..	..	..
Do.	do. at Potavaram ..	7,600	212	2,815	3,027	2,785	..
Kurnool	Taluk Cutcherry at Cumbum ..	9,395	..	90	90	..	..
Tinnevely	Third-class Taluk Cutcherry with out-offices at Virudupatti ..	..	..	2,500	2,500	..	..
Architect.	Providing additional accommodation in the Government Central Museum at Madras ..	11,615	..	5,822	5,822	..	..
Do.	Erecting a Memorial over the grave of the late Right Honorable W. P. Adam, Governor of Madras Presidency, at Ootacamund ..	6,644	..	3,801	3,844	43	..
Chingleput	District Munsif's Court at Poonamallee ..	10,350	..	10,347	10,350	..	..
Kistna Eastern.	Converting Naval's Bungalow into a District Court at Masulipatam ..	7,256	564	6,345	6,909	505	..
Madras	Sub-Magistrate's Cutcherry at Tiruvadani ..	11,785	..	5,332	5,332	..	..
Nellore	District Munsif's Court at Kavali ..	11,900	..	7,775	7,775	..	..
Do.	Alterations and improvements to the Sub-Magistrate's Cutcherry at Allur ..	4,700	257	4,002	4,259	398	..
Do.	Second-class Cutcherry and out-buildings at Kota ..	14,750	..	4,606	4,606	..	..
Salem	District Munsif's Court at Tirupattur ..	13,000	..	12,491	13,000	544	..
Tanjore	Additions and improvements to the District Court-house at Tranquebar ..	3,660	..	2,261	2,160	846	..
Do.	District Munsif's Court at Tiruvadi ..	11,900	..	4,055	4,900	101	..
Do.	Do. at Mayavaram ..	13,600	..	2,430	2,800	430	..
Trichinopoly	Do. Court at Ariyalur ..	16,100	..	6,366	6,800	566	..
Do.	Do. Court-house at Kullitalai ..	7,200	6,511	6,487	5,000	1,487	..
Coimbatore	Additions and improvements to the Munsif's Court at Mangalore ..	12,380	8,955	473	9,428	..	937
Do.	District Munsif's Court at Udipi ..	14,700	..	313	1,000	473	..
Do.	Do. do. at Coondapoor ..	13,200	..	2,500	2,500	..	..
Do.	Do. do. at Puttur ..	13,200	..	1,621	5,000	3,379	..
North Arcot	District Munsif's Court at Tellicherry ..	13,450	9,553	4,341	13,894	444	..
Do.	Second-class Sub-Magistrate's Cutcherry with out-houses at Tiruvannam ..	12,620	..	6,110	6,110	..	..
Kistna Western.	Sub-Magistrate's Cutcherry and out-buildings at Arantangi ..	10,300	..	5,014	5,000	14	..
Negapatam	Extending the District Munsif's Court-house at Negapatam ..	3,100	..	1,111	1,100	11	..
Presidency	Constructing a wall along the western boundary of the compound of St. Andrew's Kirk and a plain wall on the western boundary, Egmore ..	4,885	..	2,665	2,285	380	..
Chingleput	Purchase of the Roman Catholic Churches at Mount and Poona-mallee ..	6,900	..	7,150	6,900	250	..
Do.	Constructing a Cemetery at St. Thomas' Church at Ootacamund ..	4,430	1,540	620	1,600	640	..
Nilgiri	Constructing a Telegraph Office with out-houses at Ootacamund ..	13,776	10,253	2,468	12,721	3,524	..
Do.	Purchase of Messrs. Brown and Company's house at Vayitri ..	6,660	2,576	4,000	4,500	..	..
South Arcot	Subsidiary Jail with out-buildings at Mannargudi ..	2,11,100	2,531	15,744	5,752	3,420	..
Tanjore	District Jail at Tanjore ..	2,08,000	94,557	30,780	21,600	2,860	..
Tinnevely	New Jail at Palamcottah ..	..	..	1,25,337	31,000	..	..

List of Major Works under Provincial undertaken during the year 1882-83—cont.

Division.	Work.	Main Head.	Estimate.	Outlay to end of previous year.	Outlay during year reviewed.	Total of Columns 5 and 6.	Allotment during year reviewed.	More than Allotment.	Less than Allotment.
1	2	3	4	5	6	7	8	9	10
Kistna Western.	Twenty Police-huts for the guard of the Gunfir Jail ..	Civil Buildings.	Rs. 6,560	Rs. ..	Rs. 4,786	Rs. 4,786	Rs. 5,848	Rs. ..	Rs. 1,062
Do.	Improvements to the Gunfir Jail ..	Do.	37,313	36,670	94	36,764	100	..	6
Nellore	Constructing Subsidiary Jail with out-houses at Kondapur ..	Do.	10,330	10,203	224	10,427	350	..	126
Do.	Improvements to the Nellore Jail ..	Do.	4,920	..	637	500	500	137	..
Madras	Providing accommodation for female prisoners, and for a stair-case and out-stone flooring in the District Jail at Madras ..	Do.	..	..	11,288	11,288	10,808	480	..
Godavari East-ern.	Providing extended workshop accommodation in the Central Jail at Rajahmundry ..	Do.	11,308	..	..	..	5,694	..	..
Do.	Water-supply and drainage of the Rajahmundry Central Jail at Rajahmundry ..	Do.	7,640	..	5,694	5,694	7,000	..	6,715
Nilgiri	Additions to the quarters of the Warders of the European Prison at Rajahmundry ..	Do.	22,164	..	285	285	..	98	..
Vizagapatam	Quarters for a Head Warder and ten Warders and for the Deputy Jailor and Head Constable attached to the Zillah Jail at Vizagapatam ..	Do.	6,040	5,813	98	5,911	..	..	..
North Arcot	Residence for the Superintendent of the Central Jail at Vellore ..	Do.	5,100	..	1,099	1,099	1,100	..	1
Coimbatore	Converting the unused general latrine attached to the District Jail into a Civil Jail for debtors at Calicut ..	Do.	26,080	..	6,820	6,820	7,000	..	180
Do.	Rebuilding the outer wall of the District Jail at Mangalore ..	Do.	4,100	..	3,174	3,174	3,845	..	671
Do.	Additions and alterations to the Police Head-quarters' office at Coimbatore ..	Do.	4,400	7,206	14	7,220	..	14	..
Godavari East-ern.	Constructing Police Head-quarters' office at Rajahmundry ..	Do.	5,530	..	5,685	5,685	5,360	325	..
Vizagapatam	Constructing a bungalow with out-houses for the Assistant Superintendent of Police at Jeypore ..	Do.	16,060	2,500	10,450	12,950	13,560	..	3,110
Do.	Constructing Police lines at the Párvatipur Hill Jail at Párvatipur ..	Do.	11,260	..	430	430	1,925	..	1,495
Nellore	Residence for Assistant Superintendent of Police at Ongole ..	Do.	4,570	2,888	847	847	2,000	..	1,153
Madras	Police buildings transferred to Government from the Madras Municipality ..	Do.	3,643	..	850	3,738	754	96	..
Trichinopoly	Constructing six Police-huts at Rayangudi ..	Do.	2,551	..	5,952	5,952	5,952	..	..
Kurnool	Police Assistant Superintendent's quarters at Cumbum ..	Do.	..	..	1,923	2,455	1,620	97	..
Chingleput	Constructing the Agricultural College or School, Government Farm, at Saidapet ..	Do.	..	..	97	97	..	..	..
Consulting Architect.	Medical School, Monagar Choultry, at Madras ..	Do.	42,023	31,928	36	31,964	7,656	36	..
Do.	Lying-in-Hospital at Egnore ..	Do.	22,742	15,087	9,387	24,474	1,731	1,731	..
Presidency	Fitting up machinery for pharmaceutical operations including cost of steam engines and lathes at the Medical Stores at Madras ..	Do.	1,78,750	1,77,510	1,248	1,78,758	1,590	..	342
Do.	Constructing a block of two rooms for males and another for females in the Lunatic Asylum at Kilpauk ..	Do.	7,567	..	7,567	7,567	4,808	2,759	..
Do.	Re-roofing the infirmary attached to the Monagar Choultry at Madras ..	Do.	6,940	..	6,787	6,787	6,940	..	153
Do.	..	Do.	5,835	4,914	731	5,645	922	..	191

GENERAL AND BUILDINGS AND ROADS BRANCH.

Division.	Work.	Main Head.	Estimate.	Outlay to end of previous year.	Outlay during year reviewed.	Total of Columns 5 and 6.	Allotment during year reviewed.	More than Allotment.	Less than Allotment.
1	2	3	4	5	6	7	8	9	10
Do.	Improvements to the Chemical Examiner's laboratory at Madras ..	Do.	22,900	..	4,861	4,861	5,000	..	139
Do.	Constructing two Cornish boilers for the punkah-pulling machinery at the General Hospital at Madras ..	Do.	10,309	300	10,009	10,309	8,400	4,909	..
Coimbatore	Additions and improvements to the Lunatic Asylum at Calicut ..	Do.	3,865	4,083	2,821	6,904	3,281	..	460
Godavari West-ern.	Dwelling-house for the use of the Public Works Officers at Chettipet ..	Do.	16,370	12,870	2,635	15,505	2,600	135	..
Kistna Western.	Improvements to Government Work-houses at Rayapuram ..	Do.	14,590	740	11,482	12,222	10,000	1,482	..
Do.	Forming cricket ground at Chepauk Park ..	Do.	20,290	19,068	1,161	20,229	1,228	..	67
Madras	Restoration of Tectum Naick's Palace ..	Do.	4,500	3,872	828	4,600	828	..	656
Tanjore	District Registrar's Office at Tanjore ..	Do.	1,64,723	1,62,018	49,944	2,01,962	50,600	916	..
Do.	First-class Divisional Office at Tanjore ..	Do.	10,280	3,651	7,190	10,841	6,280	86	..
Do.	Sub-Registrar's Office at Kumbakonam ..	Do.	5,136	5,669	2,066	2,066	2,000	36	..
Nilgiri	Constructing a block of quarters for coolies on the borders of the Sero-house hill property at Ootacamund ..	Do.	38,220	4,971	17,970	22,941	16,374	..	404
Do.	Two barracks and latrines at Stone-house and one barracks and latrine at Kasidal for a Company of Queen's Own Sappers and Miners, Ootacamund ..	Do.	2,790	..	840	840	2,790	..	1,950
Do.	Purchase of the Bombay Castle property ..	Do.	21,760	..	9,103	9,103	10,000	..	897
Coimbatore	Registrar's Office at Calicut ..	Do.	6,710	4,420	1,436	7,168	77,000	..	6,432
Do.	Do. at Coimbatore ..	Do.	3,920	..	2,652	6,552	1,290	345	..
Do.	Sub-Registrar's Office at Alathir ..	Do.	2,600	..	230	2,830	820	..	1,368
Do.	Do. at Comdapoore ..	Do.	3,357	..	287	3,644	750	..	690
Do.	Do. at Karikal ..	Do.	3,050	..	2,004	2,004	500	4	..
Do.	Do. at Tirutala ..	Do.	2,553	..	568	3,121	2,000	19	..
Do.	Registrar's Office at Mangalore ..	Do.	4,600	..	3,019	3,019	3,000	..	995
Consulting Architect.	Converting a portion of the School of Arts premises into a picture gallery at Madras ..	Do.	9,328	7,653	1,639	9,292	1,678	..	39
Do.	Additions and improvements to the Madras Observatory at Madras. Adding a record room to the office of the Examiner, Public Works Accounts, and a verandah to the premises of the Lithographic Branch, Public Works Department, at Chepauk ..	Do.	4,865	..	4,808	4,808	4,865	..	57
Do.	Additions and improvements to the Public Works at Chepauk ..	Do.	6,446	..	6,276	6,276	6,448	..	172
Do.	Constructing an electric clock turret on the Mount Road at Madras. Remodelling the Central Museum of the School of Arts at Madras. Alterations and additions to the Zanana Ameer Mahal ..	Do.	64,618	..	29,161	20,161	20,000	161	..
Do.	Registrar's Office at Bellary ..	Do.	3,110	..	1,537	1,537	1,847	..	310
Bellary	Converting the old barracks into a dwelling-house for the Sub-collector at Ongole ..	Do.	16,951	..	11,856	11,856	12,000	..	144
Nellore	Purchase of Onalow Court at Chattrapur ..	Do.	72,115	..	5,012	5,012	5,000	12	..
Do.	Temporary Division Office at Gudivada ..	Do.	4,265	..	1,994	1,994	2,000	..	6
Ganjum	Sub-Registrar's Office at Gudivada ..	Do.	11,074	7,386	2,400	9,786	3,888	..	1,288
Gudivada	Cumbar-Gudalur Road ..	Do.	12,000	..	13,000	12,000	12,000	..	..
Do.	New Pottingy Ghat at Jeypore ..	Do.	2,800	..	698	280	1,000	..	402
Vizagapatam	Providing new railings for the parapets of Government House at Madras ..	Communications	73,748	5,701	1,068	6,769	13,180	..	12,112
Consulting Architect.	Bridges at Madras ..	Do.	4,22,711	1,62,170	1,46,388	3,07,558	1,45,000	388	..
Presidency	South Beach Promenade at Madras ..	Do.	7,855	..	7,920	7,920	7,855	65	..
Do.	Drainage of the Ootacamund Basalt at Ootacamund ..	Miscellaneous Public Im-provements.	48,616	..	24,023	24,023	23,415	608	..
Nilgiri	Drainage of the Ootacamund Basalt at Ootacamund ..	Do.	94,000	7,128	39,773	39,773	40,000	..	..
Godavari East-ern.	..	Do.	..	..	..	..	..	..	..

ANNUAL REPORT OF THE P.W.D., GENERAL AND BUILDINGS AND ROADS BRANCH.

List of Major Works under other Incorporated and Excluded Local Funds undertaken during the year 1882-83.

Division.	Work.	Main Head.	Estimate.	Outlay to end of previous year.		Outlay during year reviewed.		Total of Columns 5 and 6.	Allotment during year reviewed.	More than Allotment.	Less than Allotment.
				5	6	6	7				
1.	2	3	4	5	6	7	8	9	10		
Architect, Consulting.	Remodelling the central tower of the Presidency College	Civil Buildings	Rs. 4,690	..	Rs. 4,661	Rs. 4,661	Rs. 4,690	..	Rs. 29		
Cuddapah ..	Constructing a Middle School-house at Madanapalle ..	Do. ..	4,935	4,687	136	4,822	..	135	..		
North Arcot ..	Constructing the School-house at Chittoor ..	Do. ..	41,160	..	7,049	7,049	10,000	..	2,951		
Godavari Western ..	Constructing Taluk School-house at Viravésaram ..	Do. ..	4,066	8,073	857	3,930	982	..	125		
Nellore ..	Completion of Anglo-Vernacular School at Ongole ..	Do. ..	9,390	9,435	59	9,494	59	..	20		
Ganjam ..	Constructing a School-house at Tekkah Raghunadpur ..	Do. ..	3,530	43	-20	23	..	..	..		
Godavari East-ern.	Kovūr-Munjaīr Junction Canal ..	Communications.	1,66,210	44,249	20,473	64,722	20,000	..	..		
Negapatam ..	Improving the Port of Negapatam ..	Miscellaneous Public Improvements.	6,415	500	4,764	5,264	5,165	..	401		
Do.	Revetting the inner slopes of the boat basin at Negapatam	Do. ..	4,680	..	3,675	3,675	3,680	..	5		
Krishna Eastern.	Quay wall in the creek below tidal lock ..	Do. ..	16,257	13,989	2,029	16,018	2,268	..	239		
Coimbatore ..	Closing the old mouth of the Nitravati river at Mangalore	Do. ..	10,560	..	4,612	4,612	9,807	..	5,195		

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