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Public works DEPARTMENT

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ADMINISTRATION REPORT

OF THE

PUBLIC WORKS DEPARTMENT,

GENERAL AND BUILDINGS AND ROADS BRANCH,

MADRAS PRESIDENCY,

FOR THE YEAR

1878-79.

MADRAS:
PRINTED BY E. KEYS, AT THE GOVERNMENT PRESS.

1879.

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2

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CONTENTS.

	Page
Public Works Department	3
Imperial Grant	3
Provincial Grant	3
Local and Special Grant	3
Changes in the Department	3
Famine Operations	3 & 4
Abstract of Works noticed	4
Order of Review	4
IMPERIAL, MILITARY—	
Works in Bellary	4
Do. Presidency	4
Do. Chingleput	5
Do. Bangalore	5
Do. Salem	5
Do. Trichinopoly	5
Do. Nilgiri	5
Do. Mysore	5
Do. Canara	5
IMPERIAL, OTHER SERVICES—	
Works in Nellore	6
Do. Chingleput	6
Do. South Arcot	6
Do. Salem	6
Do. Tanjore	6
IMPERIAL, MISCELLANEOUS PUBLIC IMPROVEMENTS—	
Madras Harbour Works	6 & 7
PROVINCIAL, CIVIL BUILDINGS—	
Works in Ganjam	7
Do. Vizagapatam	7
Do. Godavari	7
Do. Kistna	7
Do. Nellore	7
Do. Bellary	7
Do. Kurnool	7
Do. Cuddapah	7
Do. Presidency	7
Do. Chingleput	8
Do. South Arcot	8
Do. Salem	8
Do. Coimbatore	8
Do. Nilgiri	8
Do. Malabar	8
Do. Canara	8
Do. Trichinopoly	8
Do. Madura	8
Do. Tanjore	8
Do. Tinnevelly	8
PROVINCIAL, COMMUNICATIONS—	
Works in Ganjam	8
Do. Vizagapatam	9
Do. Presidency	9 & 10
Do. Nellore and Chingleput	10
Do. Nilgiri	11
Do. Coimbatore	11
Do. Madura	11
Famine	11
Local	11

	Page
PROVINCIAL, MISCELLANEOUS PUBLIC IMPROVEMENTS—	
Works at the Presidency	11
Do. Nilgiris	11
Do. Malabar	11
SPECIAL, CIVIL BUILDINGS—	
Works in Vizagapatam	11
Do. Godavari	11
Do. Kistna	11
Do. Nellore	12
Do. Kurnool	12
Do. Cuddapah	12
Do. Presidency	12
Do. Trichinopoly	12
Do. Tinnevelly	12
Do. Canara	12
SPECIAL, MISCELLANEOUS PUBLIC IMPROVEMENTS—	
Works in Godavari	12
Do. Malabar	12
Do. Canara	12
WORKSHOPS—	
Dowlaishvaram Workshops	12
Bezwada Workshops	12
Presidency Public Works Workshops and Stores	12 & 13

APPENDICES.

APPENDIX A.	17 & 18
APPENDIX B.	19—22
APPENDIX C.	23—25
APPENDIX D.	26—28
APPENDIX E.	29—31

ADMINISTRATION REPORT

OF THE

PUBLIC WORKS DEPARTMENT,

GENERAL AND BUILDINGS AND ROADS BRANCH.

THE year's results may be summarised as follows. The Imperial grants amounted to Rupees 38,07,849, of which Rupees 35,92,076 were provided from Ordinary Revenue, and Rupees 2,15,773 from Loan Funds. The grant from Ordinary Revenue was sub-divided against Irrigation for which Rupees 29,13,449 were provided, and Rupees 17,42,162 spent; Military Services, for which Rupees 5,56,448 were provided and Rupees 5,49,489 spent; and Other Services, for which Rupees 1,22,179 were provided and Rupees 1,00,532 spent.

The grant from Loan Funds, or for Capital Productive Public Works, amounted to Rupees 2,15,773; it was, as usual, solely expended upon those large irrigation works, which, in the opinion of Government, give a reasonable promise of a return at least equal to the interest of the money laid out upon them, and upon which an expenditure of Rupees 1,92,784 against the total grant was incurred.

The Provincial grant amounted to Rupees 12,38,861, compared with an outlay of Rupees 17,39,464, the aggregate amount of the grants-in-aid to Local Funds being Rupees 82,980. The amount placed at the disposal of the Public Works Department from Local and Special Funds, less the grants-in-aid just mentioned, stood at the end of the year at Rupees 37,89,654, against which has to be set an expenditure of Rupees 21,28,323.

Among the changes that took place during the year were the following:—

Colonel Foord, R.E., Chief Engineer and Secretary to Government, vacated his appointment in February 1879, and was succeeded temporarily by Colonel Shaw-Stewart, R.E., the Consulting Engineer for Railways, until the arrival of Colonel Sankey, R.E., the permanent incumbent.

The re-organization of the department which had been long in contemplation was given effect to. The principal changes introduced were the division of the Presidency for purposes of supervision into five circles, each presided over by a Superintending Engineer, and the reduction in the number of executive divisions from 76 to 39, each to be held by an officer of the Engineer grade.

Fair progress was made with the compilation of a revised Public Works Code for the guidance of the department, but the work is still far from completion.

The year 1878-79 was exceptional. The special arrangements in regard to famine works noticed in the Administration Report for 1877-78 were continued in the districts of Chingleput, North Arcot, South Arcot, Coimbatore, Cuddapah, Nellore, Salem and Bellary. As the season improved relief operations were gradually discontinued until orders were issued for finally closing them at the end of December 1878. With the cessation of work the famine establishments were also discontinued, the officers and subordinates whose services were obtained from other provinces being retransferred and the temporary establishments locally entertained

N.B.—The figures given throughout this report and in the appendices are subject to modification with reference to the final closing of the books of the Examiner of Public Works Accounts.

dispensed with. Owing to the unusual drain on the public resources in consequence of the large outlay caused by the famine, the Government of India in November 1878 invited the co-operation of this Government in devising such measures as might be found possible for the reduction of the ordinary expenditure of the country within the narrowest possible limits. It thus became necessary to restrict the outlay on Ordinary Public Works to expenditure to which the Government were absolutely committed, or which could not be avoided without loss to Government directly or indirectly, or without causing damage to other works. With this view orders were issued to stop all expenditure pending the issue of a revised budget based on a fixed limit to suit existing circumstances. This revised budget was unavoidably delayed until the 25th March, or a few days before the close of the year. The consequence was that several payments for which provision had been made in the budgets had to be deferred until the next official year. All these circumstances combined to render the ordinary outlay of the year less than it would otherwise have been.

During the pause thus occasioned in the execution of works, instructions were given for the employment of the staff on the completion of investigations of projects which had been partly carried out, and in the preparation of plans and estimates generally.

The statements given in Appendices A and B show the final grants and outlay under the different funds and heads of classification.

In Appendix E will be found the usual abstract exhibiting the works about to be reviewed under their budget nomenclature, with the exact sums appropriated for and expended on each of them.

The order of review will be the same as that adopted in the Administration Report for 1877-78.

IMPERIAL, MILITARY—Bellary.—The following additional accommodation was provided during the year for the European Infantry at this station. A double latrine was added to the additional barrack and band-room completed in 1876-77, and drains, the provision of which was necessary on sanitary grounds, were also constructed for the family quarters. As stated in the report for 1877-78 the improvements connected with the supply of water to the town of Bellary have all been completed with the exception of the revetment to the Allipore tank, a portion of which had to be rebuilt. No work was done during the year in consequence of the withdrawal of the appropriation originally made. With the exception above noted, the work is reported to be in good order. In addition to the above, several minor improvements were carried out, and the usual repairs to military buildings executed.

Presidency.—The purchase of the site for the proposed Native Infantry lines at Poodicopett was completed, and the sum of Rupees 24,830 paid on account, to the Collector of Madras. This site was subsequently abandoned on sanitary grounds and another site for the purpose chosen at Pallavaram. The improvements to the Gunpowder Factory, commenced in August 1877, were continued during the year, the earthwork being executed by famine labor. The work is three-fourths completed, and as the original estimate had been largely exceeded a revised estimate had to be submitted. This revised estimate the Government declined to sanction on the ground that the present mills appeared to be able to make a sufficient supply of powder, and that the work had been forwarded by famine labor beyond what was anticipated. The works have accordingly been stopped.

The work of attaching lightning conductors to the Infantry and Artillery magazines in the Fort commenced on an estimate of Rupees 1,350, was completed during the year on a revised estimate of Rupees 2,330, which was found necessary in consequence of the enhanced price of copper.

The construction of the Napier, Light-house, and Clive's batteries was commenced on emergency under the authority conveyed in G.O., No. 2,044 W., dated 6th May 1878. The earthwork was carried out by famine labor, while the concrete was done chiefly by the Sappers. The works were satisfactorily completed with the exception of two platforms at Clive's battery, which will be carried out during 1879-80.

Several minor works and repairs were executed during the year.

Chingleput.—The double-storied hospital at Poonamallee, which was commenced in June 1876 and vigorously proceeded with during 1877-78, was completed in the year under review and handed over for use in March 1879. This work, carried out by departmental agency throughout, has been completed at a cost (Rupees 98,151) considerably less than the original estimate (Rupees 1,02,000), which circumstance reflects credit on the officers and subordinates in charge. The hospital is intended to accommodate 90 patients.

At St. Thomas' Mount, the Ordnance laboratory was fitted up with ammunition racks, the work being carried out by contract agency. The entire building has been thoroughly restored, all the door and window fittings being of copper. Lightning conductors have been attached to it. Several minor new works and improvements were carried out.

Bangalore.—The drainage of the Native Infantry lines was completed with the exception of the levelling of the earthwork. A new filter has been added to the Ulsoor water works. Roof over cistern in the bakery square put on. The new engine has been put together and is now working. Racks have been provided in the Ordnance Gunpowder magazine. The Native Infantry and Volunteer stop and markers' butts, &c., were rebuilt and handed over to the Military authorities during the year. Twelve minor works were undertaken, ten completed, and two stopped for want of funds. The usual repairs were executed.

Salem.—No original works were carried out during the year. Nine buildings were repaired at the Remount Depôt, Oossoor, at a cost of Rupees 2,025.

Nilgiri.—Two works were completed and two others commenced, but stopped at the end of December for want of funds. The works completed are:—(1.) The Waterloo bridge which connects the Wellington barracks with the main road between Ootacamund and Coonoor. It was in ruins for upwards of twenty years and was partially restored in 1877-78, and thoroughly completed and opened for traffic in 1878-79. (2.) The Wellington rifle range, which consists of two parallel ranges one hundred yards apart. Each range is provided with a stop butt 18 feet high, 150 feet long and 6 feet wide at top; all the sides and tops being turfed. One range has firing platforms at every 50 yards up to 1,000, the other the same up to 900 yards. Two Bland markers' butts have also been erected wholly underground at a distance of 10 feet in front of the targets.

The Wellington barracks were whitewashed, and kept in the usual state of repair, and the Lawrence Asylums at Lovedale were thoroughly restored.

Malabar.—The only work of any importance undertaken was that of asphalting the verandahs and boarding the floors of the officers' quarters at West Hill. The asphalte floors have been completed. The wooden flooring has only been laid temporarily and will be completed as soon as seasoned timber can be got. Other smaller works which need not be detailed were undertaken. The usual repairs to all the buildings at West Hill, Calicut and Maliyapuram, and to the troop-shed at the encamping ground at Beypore were carried out. The swimming bath of the European Regiment at Cannanore was plastered with cement. Considerable difficulty was experienced with this work, owing to the strength of the springs below the floor of the bath. Other minor works and repairs, not needing special mention, were also carried out.

Canara.—Two works only were undertaken: (1) ceiling and ventilating the quarter guard-room at Mangalore, which was completed; and, (2), flooring verandah of magazine and improvements to its lightning conductor, which was nearly completed. Fourteen buildings were repaired at a total cost of Rupees 495.

Trichinopoly.—The following works were commenced and completed during the year:—(1), raising the floor and constructing compound wall round the contagious diseases ward of the European detail hospital; (2), constructing a latrine of sixteen seats for the men of the Royal Artillery; (3), sinking two wells in the lines of the Native Infantry; (4), re-covering five blocks of temporary barracks for the detachment of European Infantry.

IMPERIAL, OTHER SERVICES—NELLORE.—The salt road from the great northern road near Bodilingampad to the salt platform at Tada has been formed. The masonry works remain to be completed. The north-east and west slopes of the salt platform at Sunapugunta have been revetted with stone. The lines for the salt guard at Dujarajapatam and the road from Kavali to the salt platform at Timmalapenta were in progress during the year, but were stopped, the former under the restrictive orders, and the latter at the request of the Salt Commissioner, as it is in contemplation to abolish the salt station at Timmalapenta.

CHINGLEPUT.—The following salt works were carried out during the year:—(1) opening the bar at Ennore; (2) constructing groynes at Ennore. These works were set in hand about June 1878, and although partially successful, that is, a certain quantity of fresh sea water was at that time received into the backwater, it cannot be said that they have proved remunerative. The bar at Covelong has been opened and has kept open satisfactorily without the aid of the proposed groyne, the construction of which was consequently stopped.

SOUTH ARCOT.—The work of excavating the Pallipal drainage channel and building a bridge over it in connection with the salt-platforms at Merkanum, which was in progress last year, was completed during the year under review at a cost of Rupees 4,033, as also the repairs of the Thunbankum causeway at a cost of Rupees 3,764.

SALEM.—The Post Office at Yercaud was completed during the year at a cost slightly in excess of the estimate.

TANJORE.—The construction of a thatched Post Office at Combaconum was in progress on an estimate of Rupees 4,370, and an appropriation of Rupees 4,000, but the work was stopped in December, when Rupees 867 had been spent and the foundations of masonry completed. The work of cleaning the shallow portion of the Vadavar canal, from Kudamiar to the Velangudi locks, was commenced and completed during the year. The canal was, on the whole, kept in good order for traffic. This work, which is now classed as Provincial, will be noticed in future reports in its proper place under that head. The construction of huts for the Head Constable and fourteen Constables of the Salt Police at Adirampatam, which was commenced in 1877-78, was continued during the year under review. The Head Constables' hut and one block are completed. The roofing of the second block is in progress.

IMPERIAL, MISCELLANEOUS PUBLIC IMPROVEMENTS—MADRAS HARBOUR WORKS.—Between April 1st, 1878, and March 31st, 1879, the amount of work done in constructing the Madras Harbour was as follows:—

Very little blockcutting was done in April and May 1878, as the concrete blocks were hardly sufficiently old for placing in the superstructure. During the remainder of the year the work made fair progress. From Usilampatti, on the Madura Railway, 122,188 tons of laterite were sent to Madras in the year. From the Harbour Works quarries at the 12th and 15th miles of the South Indian Railway, 95,641 tons of stone were sent to Madras for the works. The total quantity received during the year from all sources being 217,829 tons.

North Pier.—In the rubble base of the north pier 100,914 tons of material were deposited by the screw lighter barges and by other means. On the rubble base 1,400 concrete blocks were successfully set, advancing the work by a length of 80 lineal feet and bringing the end of the pier into 6 fathoms water.

South Pier.—At the south pier there were 69,733 tons of stone deposited in the rubble base, and 1,020 concrete blocks set in the superstructure, advancing the work by 692 lineal feet.

At the south pier a new block-making platform was made along the beach, and two new cranes erected over it for moving and for making the blocks. There were 2,573 concrete blocks made during the year at the north and south pier platforms.

The works were interrupted greatly by bad weather in November and December 1878, by the breaking down of the Titan cranes in January and March 1879, and by great delay in the receipt of stores indented for from England, notably diving dresses and trunk wheels of special manufacture. The amount expended on the works

during 1878-79 was Rupees 9,34,121, and the total expended up to March 31st, 1879 Rupees 26,12,822.

From January 12th to March 7th, Mr. Parkes, the Engineer-in-Chief, was present in Madras, and expressed himself hopeful that the work would be finished in about two years, or by the end of March 1881.

The Harbour Works being now classed as Provincial Productive under the orders of the Government of India, the year's operations on the work will in future be reviewed in the proper place under this head.

PROVINCIAL, CIVIL BUILDINGS—GANJAM.—The purchase of the Special Agent's bungalow at Russelcondah was completed, the money paid to Major Smith, and the building taken charge of on the 6th May 1878. Huts for the Police at Chicacole were in progress, and the reconstruction of the roof of the Police hospital at Kimedy was completed.

VIZAGAPATAM.—The improvements to the Collector's cutcherry, which were in progress last year, were completed.

GODAVARI.—The buildings comprising the additions to the Collector's cutcherry at Cocanada were raised over a foot above basement and much of the woodwork has been prepared.

KISTNA.—The improvements to the Head Assistant Collector's cutcherry and the additions to the District Munsif's court-house at Bezwada were completed during the year.

NELLORE.—The taluk cutcherries at Sulurpett and Venkatagiri were completed, and the buildings handed over to the Revenue Department. One-half of the taluk cutcherry at Kanyagiri has been completed and is occupied by the Tahsildar. The flooring of the other half, railing off the treasury and pointing to the out-houses, remain to be done. The subsidiary jails at Kandukur and Podili were nearly completed.

BELLARY.—A contribution of Rupees 2,197 was paid by Government to the Church Committee for furniture supplied to Trinity church.

KURNOOL.—The Taluk Cutcherry at Koilkuntla, which was commenced years ago, is still incomplete, although the very large amount of Rupees 68,120 has been expended upon it. The police station-houses at Arlagudda and Dorenala were completed. Ten buildings were repaired during the year at a total cost of Rupees 1,505.

CUDDAPAH.—The main building of the taluk cutcherry and subsidiary jail at Madhanapalle was completed and handed over to the Revenue Department in May 1878. The out-houses have still to be completed. Fair progress was made during the year on the taluk cutcherry and subsidiary jail at Kadri and the police stations at Guvalcheruvu, Gundlur and Thalla and at Proddutur. Eighteen repair works were undertaken, of which twelve were completed, the whole costing Rupees 2,071.

PRESIDENCY.—An aloe hedge has been planted round the compound of the Lunatic Asylum, and a sky-light provided in the stationery room of the Stamp Office. The work of converting the old workshops at Chepauk into offices for the Public Works Department, which was commenced in 1876-77, was continued during the year. The whole of the work as provided for in the revised estimate of Rupees 1,26,200 sanctioned in G.O., No. 546 W., dated 21st February 1879, has been completed with the exception of fitting up doors and windows and painting of woodwork in the south-west wing. The offices now located in the new building are those of the Examiners, Public Works and Railway Accounts, Consulting Architect, Consulting Engineer for Railways, Superintending Engineer, Third Circle and the Executive Engineers, Presidency and Buckingham canal. Of the works under the immediate supervision of the Consulting Architect, the new lying-in hospital at Madras was in progress during the year. The whole of the five blocks and connecting corridors are above ground. One block is floored over and two others are ready for the flooring when the work is resumed. Among the smaller works executed may be mentioned a new latrine for the Revenue Board Office, constructed at a cost of Rupees 3,533.

Outlay to the extent of Rupees 13,495 was incurred in maintaining the roads and bridges in the Presidency division during the year under review.

CHINGLEPUT.—The cost of undertaking protective works in connection with the Tiruvallur taluk cutcherry has been greatly enhanced by its being found necessary to add retaining or counterfort walls to support the basement and foundation masonry, and to rebuild a portion of the outer walls of the building, which had subsequent to the drawing up of the original estimate shown signs of instability, arising from the subsidence of the foundation, evidently due to the fact of the sub-soil being undermined by the constant flow of the numerous springs. Out-trenches have been opened out to drain off the water, but great difficulty is experienced in carrying off this intercepted drainage, since the surrounding ground, or the only drain that can be made use of, is at too high a level. The water now runs off into a temporary constructed well, and during the time the building was undergoing repair the water was pumped out of the well by cooly labor, but whether this pumping work is or can now be continued is very doubtful. The matter is now under consideration in communication with the Revenue authorities.

SOUTH ARCOT.—The bungalow and office for the Assistant Superintendent of Police at Tirukoilur have been completed and made over to the Police Department. Police huts for constables were under construction at Franklore, Pennattur and Kilianore.

SALEM.—The police huts attached to the Central Jail at Salem, which were completed in 1877-78, were occupied by the police during the year. The station-house at Thathiengarpettai has been completed, but portions of it will have to be re-done on account of bad workmanship. The ryots' shed, &c., for the Collector's cutcherry and the police station-house at Jowlagiri were finally completed and made over to the Revenue Department.

COIMBATORE.—The bungalow for the Sub-Collector at Erode, commenced in 1877-78, was completed during the year at a cost slightly in excess of the estimate. The necessary out-houses were erected for the Inspector's quarters at Collegal, and repairs executed to the taluk cutcherry at Bhavani. Several minor works and repairs were carried out.

NILGIRI.—Expenditure to the extent of Rupees 63,228 was incurred during the year in connection with the new Government House at Norwood, Ootacamund.

MALABAR.—A room was added to the taluk cutcherry at Mungerry and the police station-house at Kolastore completed. Improvements and additions were made to the quarters of the Superintendent of the Jail at Cannanore and to the police station-houses at Terriote and Kalputty. The usual repairs were executed.

CANARA.—The following works were carried out during the year:—Removing the roof of the out-houses of the sub jail at Udipi. Paving the floor of the sea custom-house at Mangalore and ceiling the record-room attached to it.

TRICHINOPOLY.—The police station-house at Srirangam was put in hand in anticipation of the estimate being sanctioned. Masonry work has been done to its full height.

MADURA.—The Periyakulam and Pulney cutcherries were in progress during the year, both are very near completion. The improvements to the Master Attendant's residence at Paumben were completed. A special officer (Major Vibart, R.E.,) was deputed by Government to take charge of the Madura Palace works, and during the time he held charge, from the 9th February to 27th June 1878, a large quantity of work was executed. The iron pipes were altered. The under-pinning of the Judge's court was founded and brought to ground level, and the large chamber west of the dome was restored.

TANJORE.—No works worthy of notice were carried out. Ordinary repairs were executed.

TINNEVELLY.—The only works executed were some police huts. Several buildings were repaired.

PROVINCIAL, COMMUNICATIONS—GANJAM.—Expenditure to the extent of Rupees 3,995 was incurred on the canal from the Chilka lake to the port of Ganjam. The work is still incomplete.

VIZAGAPATAM.—No expenditure was incurred on the new Potinghy ghat as the work was suspended under the restrictive orders just at the time of the working season.

PRESIDENCY.—Two roads, running parallel to the Buckingham canal at Chepauk, were constructed under the supervision of Major Clark, R.E., when in charge of the Junction canal from Adyar to the Cooum river. The cost (Rupees 5,046) of the roads was originally charged to the Buckingham canal works, but was since recovered and charged separately to the head "Provincial."

NELLORE AND CHINGLEPUT.—The Buckingham canal. This work, forming a division by itself, is in charge of a special Executive Engineer who is under the orders of the Superintending Engineer of the circle. Under the orders of the Government of India the work has been classed as a Productive Public Work and is treated accordingly in the Public Works Accounts, the entire expenditure being charged to the head "Provincial." A general estimate for the whole project to include past and prospective expenditure is now under preparation. When complete the canal will extend on the north to the limits of the Kistna district and on the south to Point Calimere in the Tanjore district. During the year the work was carried out in sections as follows:—

i.—Extension of Buckingham canal from Vellar or Porto-Novo to Parangipettai. This section was undertaken, *vide* G.O., No. 3,179, Public, dated 7th August 1878, in the South Arcot district as a relief work. In this section, which is 6¼ miles long, the Executive Engineer, Cuddalore division, reports that 28 furlongs have been excavated to within 4·3 of mean sea level and that 3 furlongs of the west bank have been sloped down to within 2 feet of mean sea level. The approximate estimate amounts to ... ... Rs. 85,855

The expenditure against the above estimate in 1877-78	...	5,555
Do. do. in 1878-79	...	13,005
Total expenditure	...	18,560

ii.—Extension of Buckingham canal from the Palar to Mercanum. An estimate amounting to Rupees 1,79,600 for this portion of the canal was sanctioned in G.O., No. 1979 W., dated 11th October 1878. The work was commenced on the 28th July 1878 and stopped on the 2nd January 1879. The length of this portion of the canal is 20½ miles 3,000 running feet has been excavated on an average depth of ... ... 8 feet.
7,337 running feet do. do. do. do. ... 6 „
and 2,376 running feet do. do. do. ... 3 „
The expenditure during the year amounted to Rupees 53,050.

iii.—Deepening the southern canal from Palar to Adyar. An estimate amounting to Rupees 84,980 for deepening this portion of the canal was sanctioned in G.O. No. 965, dated 27th February 1878. The work was commenced on the 27th August 1877 and stopped on the 2nd January 1879. Thirty-five miles of the canal were deepened to 4½ feet below mean sea level and widened to 20 feet at bottom. This portion of the canal is now in good order, about 5 miles including the Palar river, remains to be done. The expenditure up to end of 1877-78 amounted to ... ... Rs. 31,320
The expenditure in 1878-79 39,021
Total expenditure ... 70,341

iv.—Junction Canal from Adyar to Cooum river. The estimate for this section has not been sanctioned by Government, it amounts to 7,48,920

The expenditure up to 1877-78	...	6,12,156
Do. in 1878-79	...	47,324
Total expenditure	...	6,59,480

v.—Deepening northern canal from Madras basin to Pulicat. An estimate for this work has not been sanctioned by Government. It amounts to ... ... Rs. 65,500

The expenditure incurred up to 1877-78 amounts to 35,084
Do. in 1878-79 3,037

Total expenditure ... 38,121

vi.—New canal from Pulicat to Cusha. This work was undertaken under the authority of G.O., No. 544 W., dated 4th August 1877. Excavation has been completed and the canal opened for navigation. An estimate, amounting to Rupees 3,20,000, for this portion of the canal is ready and will be incorporated with the estimates for other portions of the canal under recent orders.

The expenditure up to 1877-78 1,48,172
Do. in 1878-79 37,884

Total expenditure ... 1,86,056

vii.—Improving old canal from Cusha to Kistnapatam. This work was undertaken under the authority of G.O., No. 544 W., dated 4th August 1877. This section of the canal was filled up very much and was for some time in the dry season of 1877 impassable. The worst places were cleared in 1877-78, and the canal re-opened to traffic. The work was continued in 1878-79 and great improvement made throughout the whole length of about 47 miles. The estimates for this section are nearly ready.

Expenditure up to end of 1877-78 7,208
Do. in 1878-79 62,520

Total ... 70,728

viii.—Extension of canal from Kristnapatam to the Pennair. An estimate for this section was sanctioned in G.O., No. 151, of 21st January 1876, amounting to 2,74,000

The work was commenced in 1875-76 and continued as a relief work during the past two years. It was opened to navigation in May 1877. There is a small quantity of work still to be done; a revised estimate is being prepared.

Expenditure up to 1877-78 3,03,413
Do. in 1878-79 60,126

Total ... 3,63,539

ix.—Extension of canal from Pennair to Kistna frontier. This work was ordered to be undertaken as a relief work in 1876.—*Vide* G.O., No. 3,060, of 15th November 1876. The whole length of this portion of the canal is 32 miles 5 furlongs and 63 yards, the work was commenced in December 1876 and was opened for navigation in January 1878. All the masonry works and a small quantity of earthwork and turfing remain to be done. The estimate, amounting to Rupees 17,90,000, was submitted on the 20th July 1877.

The expenditure to the end of 1877-78 14,97,000
Do. in 1878-79 2,89,093

Total, expenditure ... 17,86,118

The traffic on the canal for the year ending 31st December 1878, amounted to ... ... 268,902 tons.
The ton mileage to 9,102,295
Passengers carried 140,011
Fees collected ... ... Rs. 52,282

NILGIRI.—During the closing five months of 187- the rainfall was unusually heavy, and the famine having prevented grain from being supplied from Mysore to the Wynad and Ootacamund, grain was carted up to the hills from Coimbatore. These combined occurrences greatly cut up the main road between Coonoor and Ootacamund, and an estimate of Rupees 14,478 was sanctioned for coating the whole of it properly with some 4 inches of blue granite metal. Two-thirds of the work was carried out in 1878-79, the first third having been previously executed in 1877-78.

COIMBATORE.—It was intended that the road from Mettapolliem to Kullar should carry a line of railway, in addition to the ordinary wheel traffic, and the necessary work was being carried out from Famine Funds, but after the stoppage of famine works it was decided to treat the line as a road only and the work is being continued as a Provincial undertaking.

MADURA.—Of the 30 miles of the new Pulney ghat the whole are open for carts, &c., with some temporary deviations. One stream has been bridged, and 31 first-class drains, 1[illegible] common drains, and 4 revetments have been finished.

In the preceding summary of the chief works classed under Communications no mention has been made of the roads constructed from Famine Funds. They will receive notice in the separate Administration Report which will shortly issue.

The roads constructed from Local Funds, provided in the several circle budgets, will, as on former occasions, receive no special notice in this Administration Report.

PROVINCIAL AND MISCELLANEOUS PUBLIC IMPROVEMENTS—PRESIDENCY.—The work of widening and deepening the Ottary nullah for facilitating the drainage of waste land about Perambur and Veysaurpaudy was completed satisfactorily. Outlay to the extent noted was incurred on the conservancy of the Cooum (Rupees 1,001), in strengthening the bund across the Cochrane's canal near the General Hospital (Rupees 752), and on what is now known as the Veysaurpaudy project (Rupees [illegible]). This project was started as a famine work late in 1876 under the direct control of the Madras Municipality, but it was subsequently handed over to the department, and placed under the charge of Mr. Watson, Assistant Engineer. The object of the project was to open out a channel on the west side of the Cochrane's canal bank and to utilize the earth excavated in forming a broad embankment which might eventually be converted into a road. The channel was projected to intercept the drainage from all the out-lying ground, and to empty its contents into the canal at one or two points, where overfalls or weirs were proposed to be built. This work was entirely suspended in February 1878, with the exception of the construction of the three-vent bridge fitted with self-acting shutters which spans the new channel and connects the roadway leading from Puduvail to Trivettore (about 6 miles from Madras on the road leading to Ennore) with the old Trivettore bridge over the Cochrane's canal. The self-acting shutters have not as yet been tested, as there has been no heavy rainfall during the latter part of the year 1878-79.

NILGIRIS.—The work of restoring the 20th Hill viaduct at Ootacamund became necessary in consequence of its foundations having been injured by the heavy rains at the close of 1877. It was restored by rebuilding the upper portion of the cracked pier, by adding a third pier or tank in the form of [illegible] with a wide base, and by extending the aqueduct with a fourth span of 20 feet on its southern extremity to solid unmined ground.

MALABAR.—A short groyne was thrown out [illegible] Cochin harbour to prevent encroachment at the southern bank at the entrance of the river, and appears to have answered its purpose so far.

SPECIAL, CIVIL BUILDINGS—VIZAGAPATAM.—Progress was made with the new Zillah jail at Vizagapatam and with the alterations and additions to the Hill jail at Parvatipur.

GODAVARI.—A commencement was made with the construction of the new taluk school-house at Viravaram.

KISTNA.—The following works in connection with improvements to the jail at Guntur were completed during the year, viz., hospital ward for contagious diseases, dissection and surgery rooms, hospital cook-room and privy, new solitary cells,

ventilators to old solitary cells, improvements to four of the wards, general privy, shed for dry earth, verandas and compound walls.

NELLORE.—The school-house at Gogole was almost completed.

KURNOOL.—The work of improving the Zillah jail was completed with the exception of the wire fencing.

CUDDAPAH.—The subsidiary jail at Pedlar was almost completed.

PRESIDENCY.—A chemical laboratory was added to the Government School of Agriculture at the Saidapet farm and the work satisfactorily completed by contract.

TRICHINOPOLY.—The following works were completed during the year:—Improvements to the solitary cells for female wards and to the cells for European prisoners in the Central jail.

TINNEVELLY.—The progress up to date on the new jail at Palamcottah is as follows:—

(1)—The main building is about half completed.
(2)—Four wards are raised to embankment level.
(3)—Workshop shed completed except pointing.
(4)—Boys' ward and store-house finished.

CANARA.—The jailer's quarters at Mangalore were completed.

SPECIAL, MISCELLANEOUS PUBLIC IMPROVEMENTS—GODAVARI.—The light-house at Vakalapudi has been completed, and has been in use for some months. Materials have been collected for the Superintendent's quarters, and the work is now in progress.

MALABAR.—For the protection of the sea wall at Calicut three groynes were constructed on the north side of the sea wall between Rocky Island and Beypore. Two other groynes were run out to protect the foreshore in front of the new custom-house. The works have answered so far the purpose in view. The Cruickshank dam at Cochin has been widened at a cost of Rupees 2,219 and a tidal observatory erected at Beypore at a cost of Rupees 1,000.

CANARA.—With a view to determine eventually with some degree of correctness the cost of permanently improving it, and in order to keep Government informed from time to time of its actual state, the harbour at Mangalore was twice surveyed during the year in accordance with G.O., No. 629 W., dated 7th February 1878.

WORKSHOPS—DOWLAISWARAM.—The total expenditure during the year 1878-79 was Rupees 97,945, of which (1) Rupees 67,835 was for new works, and (2) Rupees 19,658 was for repairs; (3) the value of work done for private parties amounted to Rupees 5,780, and (4) the expenditure on workshop stores and sundries amounted to Rupees 16,040. The charge for establishment was Rupees 14,463, being 17 per cent. on the value of work turned out, not including stores and purchases. The recoveries by bills during the year amounted to Rupees 49,100.

BEZWADA.—The operations of the Bezwada workshops during the year were chiefly making punts, ballacuts, boats, and lock gates; also executing usual repairs to floating plant.

PRESIDENCY PUBLIC WORKS STORES AND WORKSHOPS.—Up to 31st March 1878 all stores were held and maintained under three separate heads of service, viz., "Imperial, Roads and Buildings," "Irrigation" and "Provincial;" but in G.O., No. 1,366, 17th April 1878, they were ordered to be classed as "Provincial" from the 1st of April 1878. This order has been carried out and has worked well. All stores being issued on payment, the complete system of store-keeping has also been much simplified under instructions from the Examiner, Public Works Accounts.

The year opened with stock in hand to the value of Rupees 2,88,749 and the receipts from all services amounted to Rupees 14,262-8-8, making a total of Rupees 3,03,011-8-8. The issues amounted to Rupees 55,097-5-3, leaving a balance of stock in store on the 31st March 1879 amounting in value to Rupees 2,47,914-3-5 or Rupees 40,835 less than the opening balance.

The amount received from the treasury for carrying on the operations of the shops for the year 1878-79 amounted to Rupees 1,71,000, and the value of stores, &c.,

received from Public, &c., departments to Rupees 59,953, making a total of Rupees 2,30,953, to cover which payments and adjustments to the extent of Rupees 2,61,953 were made, being Rupees 31,000 more than the advance received. The works carried out by the shops were as usual numerous and various.

There were changes in the charge of the stores and workshops during the year under review. Mr. Grainger, the General Superintendent, having obtained two years' furlough to Europe, was relieved on the 14th May 1878 by Mr. G. H. Faulkner, an Executive Engineer, Bengal Department Public Works, whose services were temporarily transferred to this Presidency in connection with the famine. Mr. Faulkner continued in charge until relieved by Lieutenant Baddeley, R.E., on the 6th January 1879, after completing a careful stock-taking of "Provincial" and Workshop Stores, which was found to correspond with the books.

Under the new organization of the Public Works Department, the Public Works Stores and Workshops have been placed under the immediate orders of the Chief Engineer, *vide* G.O., 31st March 1879, No. 857 W. By this arrangement the work of the Stores Department has been greatly facilitated and much time and correspondence saved.

In view to the due relief to the staff of the Executive Engineer, Presidency, the Government of India, G.O., No. 477 W., dated 19th February 1879, directed the transfer of the lime kilns to the charge of the General Superintendent, and the manufacture and issue of lime as any other material supplied by the Workshops.

APPENDICES.

APPENDICES.

APPENDIX A.

Statement of Outlay as compared with the Final Grants during the Year 1878-79.

	Final Grant.	Outlay.
	Rs.	Rs.
IRRIGATION.		
Imperial Productive.		
Works	1,91,882	1,07,858
Establishment	45,360	1,23,640
Tools and Plant	8,569	11,241
Fluctuations in Suspense Balances	...	83
Less Receipts on Capital Account	38	50,038
Total ...	2,15,773	1,92,784
IMPERIAL ORDINARY.		
Capital.		
Works	2,87,344	63,252
Establishment	1,12,006	29,872
Tools and Plant	9,569	1,951
Fluctuations in Suspense Balances	2,860	2,860
State Outlay on Guaranteed Irrigation Works	5,900	5,787
Less Receipts on Capital Account	15	15
Total ...	4,11,944	98,087
Revenue.		
Extensions and Improvements	22,856	31,529
Maintenance and Repairs	4,29,948	4,18,105
Establishment	2,21,695	2,42,722
Tools and Plant	51,795	35,154
Total ...	7,26,294	7,17,510
Ordinary Agricultural.		
Original Works	4,81,877	90,942
Repairs	8,09,277	5,53,332
Establishment	4,38,598	2,61,189
Tools and Plant	44,759	20,602
Profit and Loss	...	...
Fluctuations in Suspense Balances	...	...
Total ...	17,75,211	9,26,565
Total Irrigation ...	31,29,222	18,34,946
IMPERIAL ORDINARY.		
Military.		
Original Works	1,94,600	1,85,359
Repairs	2,00,772	1,93,955
Establishment	1,47,342	1,54,705
Tools and Plant	13,734	15,471
Profit and Loss	...	...
Fluctuations in Suspense Balances	...	...
Total ...	5,56,448	5,49,489

APPENDIX A—*cont.*

Statement of Outlay as compared with the Final Grants during the Year 1878-79—cont.

—	Final Grant.	Outlay.
	RS.	RS.
Other Services.		
Original Works	24,285	25,103
Repairs	15,765	12,900
Establishment	76,315	52,732
Tools and Plant	3,332	1,550
Fluctuations in Suspense Balances	2,482	8,247
Total ...	1,22,179	1,00,582
Total, Imperial Ordinary ...	6,78,627	6,50,021
PROVINCIAL ORDINARY.		
Original Works	3,63,227	4,59,317
Repairs	2,37,013	1,70,942
Establishment	5,52,765	11,75,110
Tools and Plant	54,247	40,636
Profit and Loss	...	1,188
Fluctuations in Suspense Balance	31,609	30,062
Refund to Imperial Productive Grant	...	...
Total, Provincial Ordinary ...	12,38,861	17,39,464
LOCAL AND SPECIAL.		
Original Works	9,82,262	4,40,785
Repairs	20,48,168	12,45,855
Establishment	7,10,159	4,02,343
Tools and Plant	48,965	39,340
Profit and Loss	...	...
Total ...	37,89,554	21,28,323
Grand Total for the Presidency ...	[illegible]	64,52,754

APPENDIX B.

Comparative Statement of Grants and Outlay for 1877-78 *and* 1878-79 *arranged by Heads and Classes.*

Heads of Service.	1877-78. Grant.	1877-78. Outlay.	1878-79. Grant.	1878-79. Outlay.
	RS.	RS.	RS.	RS.
IMPERIAL ORDINARY.				
Military.				
Original Works	3,40,006	2,94,385	1,94,600	1,85,358
Repairs	2,55,747	2,38,893	2,00,772	1,94,955
Establishment	1,52,000	1,44,708	1,47,342	1,54,705
Tools and Plant	16,644	14,184	13,734	15,471
Profit and Loss	...	...	...	...
Total ...	7,64,397	6,92,170	5,56,448	5,49,489
Fluctuations and Suspense Balances.				
Stock Purchases and Sales	...	...	...	...
Stock	25,000	845	...	...
Miscellaneous Advances	...	10,413	...	...
London Invoices	...	...	...	...
„ Stores	...	...	...	...
Total ...	7,89,397	6,80,912	5,56,448	5,49,489
Expenditure in England	7,300	66,237	...	...
Total, Military ...	7,32,097	6,14,675	5,56,448	5,49,489
Other Services.				
Original Works	49,813	24,143	24,285	25,103
Repairs	19,590	8,985	15,765	12,900
Establishment	14,714	15,417	76,315	52,732
Tools and Plant	883	1,647	3,332	1,550
Profit and Loss	...	...	...	...
Total ...	85,000	50,192	1,19,697	92,285
Fluctuations in Suspense Balances.				
Stock Purchases and Sales		908	...	...
Stock		16,918	2,482	...
Miscellaneous Advances				1,778
London Invoices		12,842	...	2,705
Stores		1,735	...	2,705
Total ...	85,000	83,303	1,22,179	1,00,582
Less Expenditure in England				17,000
Total, Other Services ...	85,000	78,303	1,22,179	83,582
Grand Total, Military and Other Services ...	8,17,097	6,92,978		
Deduction of Grant on account Expenditure in England ...				
Net Grant and Net Outlay in India for Military and Other Services ...	8,17,097	6,92,978	6,78,627	6,02,812
INDUSTRIES.				
Imperial Productive.				
Works	2,60,350	1,78,368	1,61,882	1,07,8
Establishment	18,000	1,80,491	15,000	1,24,000

APPENDIX B—*cont.*

Comparative Statement of Grants and Outlay for 1877-78 *and* 1878-79 *arranged by Funds and Classes*—cont.

Heads of Service.	1877-78.		1878-79.	
	Grant.	Outlay.	Grant.	Outlay.
	Rs.	Rs.	Rs.	Rs.
Tools and Plant	21,428	40,153	8,569	11,241
Fluctuations in Suspense Balances	...	8,070	...	83
Total ...	3,68,874	3,26,892	2,15,811	2,42,822
Less Receipts on Capital Account	...	733	38	50,028
Net ...	3,68,874	3,26,159	2,15,773	1,92,784
Less Refund from Provincial Grant	...	...	...	...
Less Reduction of Grant to meet Expenditure in England	628	14	...	...
Less Deficit	...	...	...	...
Total, Imperial Productive ...	3,68,246	3,26,145	2,15,773	1,92,784
IMPERIAL ORDINARY.				
Capital.				
Works	86,891	57,959	2,87,344	63,352
Establishment	62,124	45,223	1,12,066	29,872
Tools and Plant	13,374	32,177	9,569	1,951
Fluctuations in Suspense Balances	...	...	...	...
State Outlay on Guaranteed Irrigation Works	16,686	19,368	2,860	2,860
	4,000	3,555	5,900	5,787
Total ...	1,49,703	1,19,546	...	...
Less Receipts on Capital Account	...	7,740	15	15
Net ...	1,49,703	1,11,806	4,11,944	98,687
Less Reduction of Grant to meet Expenditure in England.	...	...	...	...
Less Expenditure in England	...	...	...	...
Total, Imperial Ordinary ...	1,49,703	1,11,806	4,11,944	98,687
Total, Imperial Productive and Imperial Ordinary.	5,17,949	4,37,951	6,27,717	2,90,471
Revenue.				
Extensions and Improvements	22,737	19,903	22,856	21,529
Maintenance and Repairs	4,24,055	3,30,183	4,29,948	4,18,105
Establishment	2,45,025	1,90,176	2,21,695	2,42,722
Tools and Plant	50,986	41,824	51,795	35,154
Profit and Loss	...	...	...	...
Total ...	7,43,706	5,82,083	7,26,294	7,17,510
Less Reduction of Grant for Expenditure in England	...	...	...	...
Less Expenditure in England	...	...	...	...
Total, Revenue ...	7,43,706	5,82,083	7,26,294	7,17,510
Ordinary Agricultural.				
Original Works	2,29,937	44,696	4,81,877	90,942
Repairs	3,66,020	2,11,372	8,09,877	5,53,832
Establishment	2,51,204	7,11,091	4,38,598	2,61,189

APPENDIX B—*cont.*

Comparative Statement of Grants and Outlay for 1877-78 *and* 1878-79 *arranged by Funds and Classes*—cont.

Heads of Service.	1877-78.		1878-79.	
	Grant.	Outlay.	Grant.	Outlay.
	Rs.	Rs.	Rs.	Rs.
Tools and Plant	20,491	6,751	44,759	20,602
Profit and Loss	...	40	...	...
Fluctuations in Suspense Balances	282	109	...	...
Total ...	20,67,934	9,74,659	17,75,211	9,26,565
Less Reduction of Grant for Expenditure in England.	...	...	...	...
Less Expenditure in England	9,000	9,836	...	...
Total, Ordinary Agricultural ...	20,58,934	9,64,823	17,75,211	9,26,565
Total, Imperial Ordinary ...	37,69,440	22,91,779	35,92,076	23,74,379
Total, Imperial Productive and Imperial Ordinary.	41,37,636	26,17,924	38,07,849	25,67,163
PROVINCIAL ORDINARY.				
Original Works.				
Civil Buildings	4,01,212	4,81,337	2,76,324	2,71,025
Communications	2,59,419	83,678	50,576	1,20,771
Miscellaneous Public Improvement	5,820	5,720	36,327	58,521
Refund to Imperial Productive Grant ...	...	...	...	...
Total, Original Works ...	6,66,451	5,70,735	3,63,227	4,50,317
Repairs.				
Civil Buildings	1,54,732	1,43,467	1,24,332	1,05,877
Communications	1,07,715	1,06,347	1,08,625	60,297
Miscellaneous Public Improvement	12,268	3,330	4,056	4,768
Total, Repairs ...	2,73,715	2,53,144	2,37,013	1,70,942
Establishment	5,70,148	12,78,066	5,52,765	11,75,110
Tools and Plant	81,571	99,876	54,247	40,036
Profit and Loss		2,676	...	4,189
Total ...	15,91,885	22,04,497	12,07,252	17,69,516
Fluctuations in Suspense Balances.				
Stock Purchases and Sales	...	680	...	24,582
Stock	23,684	2,07,511	31,609	96,950
Miscellaneous Advances	...	24,359	...	50,295
London Invoices	...	70,228		2,320
London Stores	...	2,808	...	3,597
Total ...	16,15,569	23,75,626	12,38,861	17,30,454
Less Expenditure in England	9,600	...	...	...
Total, Provincial Ordinary ...	16,05,969	23,75,626	12,38,861	17,30,454

APPENDIX B—*cont.*

Comparative Statement of Grants and Outlay for 1877-78 *and* 1878-79 *arranged by Funds and Classes*—cont.

Heads of Service.	1877-78.		1878-79.	
	Grant.	Outlay.	Grant.	Outlay.
LOCAL AND SPECIAL.	RS.	RS.	RS.	RS.
Original Works.				
Civil Buildings	3,10,548	1,84,476	2,31,807	1,14,943
Irrigation	...	...	...	...
Communications	6,93,375	3,62,026	7,04,072	2,97,596
Miscellaneous Public Improvement	1,02,289	30,352	46,383	28,246
Total, Original Works ...	11,06,212	5,76,854	9,82,262	4,40,785
Repairs.				
Civil Buildings	55,685	33,238	39,768	24,270
Irrigation	...	...	...	...
Communications	15,00,779	5,90,513	19,02,081	11,68,586
Miscellaneous Public Improvement	1,30,422	40,090	1,06,319	57,999
Total, Repairs ...	16,95,886	6,63,841	20,48,168	12,45,855
Establishment	5,56,311	2,92,912	7,10,159	4,02,343
Tools and Plant	31,753	35,905	48,965	39,340
Profit and Loss	...	...	...	...
Total, Local ...	33,90,162	15,69,512	37,89,554	21,28,323
Grand Total, Imperial, Irrigation, Provincial and Local ...	91,33,817	65,63,062	90,52,037	64,34,940

APPENDIX C.

Statement showing the Expenditure on Public Works in 1878-79 *from Imperial Funds as compared with the Allotment for that Year.*

Districts.	Allotment.			Expenditure, 1878-79.		
	Imperial.	Irrigation.	Total.	Imperial.	Irrigation.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bangalore	64,334	...	64,334	62,230	...	62,230
Bellary	27,551	24,705	52,256	27,091	12,998	39,089
Buckingham canal	930	64	1,014	8,562	...	8,562
Cuddapah	229	44,816	45,045	45	40,541	40,586
Chingleput	68,130	54,285	1,22,415	62,486	31,994	94,479
Coimbatore	843	2,66,319	2,66,862	854	12,921	13,772
Ganjam	2,819	26,351	29,170	1,605	25,544	27,149
Godavari	1,913	2,97,689	2,99,602	1,495	2,93,395	2,94,890
Kurnool	325	27,173	27,498	96	20,932	21,028
Kistna	332	1,82,293	1,82,625	625	1,68,860	1,69,485
Madura	3,528	86,814	90,342	915	74,648	75,563
Malabar	25,155	1,746	26,901	25,866	2,038	27,904
Nellore	7,454	88,871	96,025	7,495	62,441	69,936
Nilgiri	31,114	...	31,114	30,935	...	30,935
North Arcot	4,910	3,65,051	3,69,961	2,597	15,888	18,285
Presidency (including Consulting Architect).	1,50,122	277	1,50,399	1,45,667	271	1,45,938
Salem	3,423	2,96,197	3,00,620	3,347	6,126	10,073
South Arcot	4,485	92,992	98,477	4,254	75,538	79,792
South Canara	972	...	972	716	...	716
Tanjore	8,811	1,25,355	1,34,166	9,440	1,39,297	1,48,737
Tinnevelly	3,034	1,79,625	1,82,659	1,021	1,80,187	1,82,958
Trichinopoly	20,384	85,837	1,06,221	18,252	31,769	1,50,021
Vizagapatam	2,504	6,724	9,228	3,161	5,184	8,345
Total, grants and expenditure by Public Works Department.	4,35,122	21,93,634	26,22,366	4,17,219	12,46,022	16,63,241
Total, outlay by civil officers ...	...	...	...	97	8,023	9,023
Total, grants and expenditure ...	4,39,123	21,93,884	26,29,300	4,17,316	12,55,945	16,72,261
Total, private contribution ...	...	...	...	...	...	...
Grand Total ...	4,35,422	21,93,884	26,29,300	4,17,316	12,55,945	16,72,261

Statement showing the Expenditure on Original Works in each District from Imperial Funds under the Subject Heads.

Districts.	Military.	Other Services.	Irrigation.		Total.
			Imperial Ordinary.	Imperial Productive.	
		Rs.	Rs.	Rs.	Rs.
Bangalore	74,193	...	...	...	74,193
Bellary	10,803	96	3,022	...	14,021
Buckingham canal	...	60	...	...	60
Cuddapah	...	60	12,952	...	13,012
Chingleput	...	...	12,726	...	12,726
Coimbatore	3,231	83	2,291	...	5,605
Ganjam	27	...	1,125	...	1,152
Godavari	6	133	1,179	85,295	86,613
Kurnool	...	1,318	22,067	...	23,385
Kistna	...	...	4,386	...	4,386
Madura	...	245	36,886	13,970	51,101
Malabar	...	7	2,492	...	2,499
Nellore	6,190	...	...	...	6,190
Nilgiri	...	7,335	7,581	...	14,916
North Arcot	16,055	...	...	...	14,055
Presidency (including Consulting Architect) ...	3,284	139	2,588	...	5,971
Salem	50,604	179	11,416	...	62,199
South Arcot	...	1,140	2,812	...	3,952
South Canara	...	441	7,974	...	8,415
Tanjore	189	...	...	...	189
Tinnevelly	...	5,438	15,067	...	20,505
Trichinopoly	615	142	16,805	6,256	23,818
Vizagapatam	6,797	...	1,653	...	8,450
	853	75	822	...	1,750
Total, expenditure by Public Works Department ...	1,54,856	29,007	1,26,760	1,07,858	4,68,081
Expenditure by civil officers	...	...	...	...	...
Total ...	1,54,856	29,007	1,26,760	1,07,858	4,68,081

APPENDIX C—*cont.*

Statement showing the Expenditure on Repairs in each District from Imperial Funds under the Budget Heads.

Districts.	Military.	Other Services.	Irrigation.	Total.
	Rs.	Rs.	Rs.	Rs.
Bangalore	37,701	388	..	38,089
Bellary	15,845	258	8,475	24,578
Buckingham canal	..	..	..	..
Cuddapah	..	..	25,573	25,573
Chingleput	29,272	..	19,265	48,597
Coimbatore	637	44	5,640	6,321
Ganjam	459	1,007	24,421	25,887
Godavari	266	111	1,78,699	1,79,076
Kurnool	..	96	16,547	16,643
Kistna	75	105	1,18,004	1,18,184
Madura	..	908	72,156	73,064
Malabar	17,295	471	2,038	19,804
Nellore	..	70	54,860	54,930
Nilgiri	16,228	650	..	16,878
North Arcot	964	..	12,350	13,314
Presidency (including Consulting Architect)	57,290	..	11,139	46,151
Salem	2,840	67	3,314	6,221
South Arcot	..	5,313	67,564	70,877
South Canara	496	31	..	527
Tanjore	..	5,007	1,23,330	1,28,337
Tinnevelly	887	277	1,57,079	1,58,243
Trichinopoly	11,485	..	80,306	91,791
Vizagapatam	2,215	..	4,562	6,777
Total, expenditure by Public Works Department	1,93,955	12,803	9,63,014	11,69,772
Expenditure by civil officers	..	97	8,923	9,020
Grand Total ..	1,93,955	12,900	9,71,937	11,78,792

Statement showing the Expenditure on Public Works in 1878-79 from Provincial Funds as compared with the Allotment for that Year.

	Allotments for 1878-79, including Private Contributions.	Expenditure 1878-79.
	Rs.	Rs.
Bangalore	842	842
Bellary	9,732	8,387
Buckingham canal	69,984	94,071
Cuddapah	6,378	5,102
Chingleput	43,681	19,217
Coimbatore	18,931	19,035
Ganjam	17,338	12,299
Godavari	21,908	22,903
Kurnool	9,097	8,673
Kistna	1,859	1,530
Madura	16,830	15,512
Malabar	16,952	13,487
Nellore	8,040	8,301
Nilgiri	1,16,891	1,17,471
North Arcot	10,083	6,440
Presidency	1,84,313	1,65,589
Salem	10,414	7,898
South Arcot	9,022	8,748
South Canara	5,027	2,329
Tanjore	9,335	6,475
Tinnevelly	6,238	4,661
Trichinopoly	5,332	4,283
Vizagapatam	9,467	4,757
Grant-in-aid to local	..	..
Total ..	6,30,246	5,58,898
Expenditure by civil officers	..	21,363
Refund from Provincial to Imperial Productive	50,000	50,000
Total, private contributions	..	..
Grand Total ..	6,30,246	5,30,259

APPENDIX C—*cont.*

Statement showing the Expenditure on Original Works in each District from Provincial Funds under the Budget Heads.

Districts.	Civil Buildings.	Communications.	Miscellaneous Public Improvements.	Total.
	Rs.	Rs.	Rs.	Rs.
Bangalore	685	..	..	685
Bellary	2,549	..	..	2,549
Buckingham canal	..	52,573	..	52,573
Cuddapah	3,516	..	..	3,516
Chingleput	12,486	..	..	12,486
Coimbatore	10,820	5,616	..	16,436
Ganjam	6,426	3,995	..	10,421
Godavari	8,617	63	..	8,680
Kurnool	7,168	..	..	7,168
Kistna	697	..	..	697
Madura	2,171	8,180	..	10,351
Malabar	5,895	..	2,057	8,952
Nellore	4,512	..	..	4,512
Nilgiri	60,157	12,713	5,226	78,126
North Arcot	957	..	..	957
Presidency	1,18,833	5,047	1,124	1,25,004
Salem	2,595	..	..	2,595
South Arcot	3,972	..	..	3,972
South Canara	266	..	..	266
Tanjore	1,701	..	..	1,701
Tinnevelly	2,106	..	..	2,106
Trichinopoly	1,082	..	..	1,082
Vizagapatam	2,273	581	114	2,968
Total, expenditure by Public Works Department ..	2,01,105	1,20,771	8,521	3,30,397
Expenditure by civil officers	9,660	..	..	9,660
Add grant-in-aid to local	..	..	..	..
Refund from Provincial to Imperial Productive ..	..	..	50,000	50,000
Grand Total ..	2,71,025	1,20,771	58,521	4,50,217

Statement showing the Expenditure on Repairs in each District from Provincial Funds under the Budget Heads.

Districts.	Civil Buildings.	Communications.	Miscellaneous Public Improvement.	Total.
	Rs.	Rs.	Rs.	Rs.
Bangalore	240	..	..	240
Bellary	4,838	..	..	4,838
Buckingham canal	..	498	..	498
Cuddapah	1,562	..	..	1,562
Chingleput	5,731	..	..	5,731
Coimbatore	2,500	..	..	2,500
Ganjam	1,818	..	..	1,818
Godavari	3,785	10,468	..	14,253
Kurnool	1,696	..	..	1,696
Kistna	670	..	163	833
Madura	1,391	1,912	1,853	5,156
Malabar	1,645	..	..	3,556
Nellore	1,792	..	..	1,792
Nilgiri	5,809	30,236	..	36,045
North Arcot	3,433	..	..	3,433
Presidency	27,738	13,494	2,753	43,985
Salem	6,233	..	..	6,233
South Arcot	1,777	..	..	1,777
South Canara	2,112	..	..	2,112
Tanjore	4,774	..	..	4,774
Tinnevelly	2,456	..	..	2,456
Trichinopoly	3,207	..	..	3,207
Vizagapatam	1,784	5	..	1,789
Total, expenditure by Public Works Department ..	97,008	57,203	4,768	1,58,979
Expenditure by civil officers	8,869	2,994	..	11,863
Add grant-in-aid to local	..	..	..	..
Grand Total ..	1,05,877	60,297	4,768	1,70,949

APPENDIX D.

Statement of Local and Special Funds Expenditure incurred by the Public Works Department during the Year 1878-79.

Districts.	Original Works.				
	Civil Buildings.	Irrigation.	Communications.	Miscellaneous Public Improvements.	Total.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Bellary	1,492	...	4,601	...	6,093
Civil Officers	...	...	17	...	17
Cuddapah	565	...	3,760	...	4,325
Civil Officers	...	...	653	...	653
Chingleput	6,999	...	9,236	34	16,201
Civil Officers	...	...	712	...	712
Coimbatore	1,549	...	293	49	1,891
Civil Officers	1,477	...	157	...	1,634
Ganjam	1,509	...	19,552	2,448	23,509
Civil Officers	56	...	...	...	56
Godavari	10,478	...	72,870	2,410	85,758
Civil Officers	67	...	1,350	...	1,417
Kurnool	6,147	...	1,500	...	7,647
Civil Officers	...	...	...	...	...
Kistna	1,085	...	27,760	521	29,324
Civil Officers	...	...	981	...	981
Madura	487	...	19,016	...	19,503
Civil Officers	138	...	2,375	142	2,652
Malabar	97	...	13,773	4,903	18,803
Civil Officers	...	...	390	...	390
Nellore	6,145	...	29,013	478	35,636
Civil Officers	...	...	...	...	...
Buckinghan Canal	...	...	1,600	...	1,600
North Arcot	25	...	95	...	120
Civil Officers	10,235	...	1,406	711	12,352
Presidency	23,498	...	...	...	23,498
Civil Officers	2,542	...	...	...	2,542
Salem	2,731	...	349	...	3,080
Civil Officers	...	...	618	...	618
South Arcot	2,522	...	9,134	4,803	16,459
Civil Officers	...	...	...	...	...
South Canara	616	...	26,024	131	26,850
Civil Officers	469	...	217	...	686
Tanjore	760	...	20,848	...	21,608
Civil Officers	2,139	...	2,016	9,912	15,067
Tinnevelly	2,339	...	3,494	...	18,733
Civil Officers	1,530	...	10	970	2,290
Trichinopoly	4,544	...	2,841	798	7,983
Civil Officers	33	...	2,160	...	2,193
Vizagapatam	8,360	...	17,319	1,291	26,970
Civil Officers	163	...	1,510	295	1,968
Public Works Department ...	95,297	...	2,83,078	16,216	3,94,591
Civil Officers	19,546	...	14,518	12,050	46,104
Total ...	1,14,843	...	2,97,596	28,246	4,40,785
Less Grants-in-aid from Provincial to Local	...	...	...	...	...
	1,14,843	...	2,97,596	28,246	4,40,785

APPENDIX D—*cont.*

Statement of Local and Special Funds Expenditure incurred by the Public Works Department during the Year 1878-79—*cont.*

Districts.	Repairs.				
	Civil Buildings.	Irrigation.	Communications.	Miscellaneous Public Improvements.	Total.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Bellary	560	...	21,189	1,160	22,899
Civil Officers	127	...	822	215	664
Cuddapah	235	...	60,291	...	60,526
Civil Officers	...	...	...	2,462	2,462
Chingleput	...	...	45,599	483	46,082
Civil Officers	120	...	122	1,642	1,884
Coimbatore	841	...	4,176	...	5,017
Civil Officers	727	...	6,410	330	7,467
Ganjam	363	...	69,634	1,638	71,635
Civil Officers	32	...	1,534	...	1,566
Godavari	734	...	47,958	15,487	64,179
Civil Officers	101	...	...	...	101
Kurnool	74	...	41,699	...	41,773
Civil Officers	...	...	...	1,985	1,985
Kistna	175	...	56,596	9,685	66,456
Civil Officers	8	...	291	20	319
Madura	176	...	1,07,872	3,835	1,11,883
Civil Officers	183	...	678	115	976
Malabar	1,073	...	1,58,083	1,367	1,60,523
Civil Officers	2,776	...	5,983	...	8,759
Nellore	133	...	69,883	50	70,066
Civil Officers	...	...	...	...	...
Nilgiri	348	...	21,212	...	21,560
North Arcot	108	...	7,239	...	7,347
Civil Officers	586	...	280	3,532	4,398
Presidency	204	...	...	156	360
Salem	1,139	...	1,138	...	2,277
Civil Officers	2,083	...	...	3,451	5,534
South Arcot	1,717	...	7,806	49	70,372
Civil Officers	...	...	300	...	300
South Canara	1,205	...	45,021	238	46,464
Civil Officers	895	...	639	22	1,556
Buckingham Canal	...	...	235	...	235
Tanjore	169	...	92,634	790	93,593
Civil Officers	3,946	...	1,831	...	5,777
Tinnevelly	...	...	85,377	1,474	86,851
Civil Officers	908	...	10,810	8,127	19,845
Trichinopoly	830	...	67,294	4,686	72,810
Civil Officers	211	...	511	...	722
Vizagapatam	1,329	...	38,218	...	39,547
Civil Officers	164	...	9,921	...	10,085
Public Works Department ...	11,403	...	11,18,904	41,098	11,71,455
Civil Officers	12,867	...	44,632	16,901	74,400
Total ...	24,270	...	11,63,536	57,999	12,45,855
Less Grants-in-aid from Provincial to Local	...	...	...	...	...
	24,270	...	11,63,536	57,999	12,45,855

APPENDIX D—*cont.*

Statement of Local and Special Funds Expenditure incurred by the Public Works Department during the Year 1878-79—cont.

Districts.	Establishment.	Tools and Plant.	Grand Total.
	Rs.	Rs.	Rs.
Bangalore	...	...	...
Bellary	7,247	725	36,964
Civil Officers	...	...	647
Cuddapah	16,210	1,621	82,682
Civil Officers	...	..	3,115
Chingleput	15,568	1,557	79,408
Civil Officers	2,032	...	4,628
Coimbatore	1,726	172	8,806
Civil Officers	1,071	...	10,172
Ganjam	23,781	2,378	1,21,303
Civil Officers	1,401	...	3,023
Godavari	37,476	3,747	1,91,160
Civil Officers	...	...	1,518
Kurnool	12,353	1,235	63,008
Civil Officers	...	...	1,985
Kistna	23,690	2,369	1,20,839
Civil Officers	350	...	1,650
Madura	32,840	3,284	1,67,510
Civil Officers	443	...	4,071
Malabar	44,822	4,482	2,28,630
Civil Officers	365	...	9,514
Nellore	26,420	2,642	1,34,764
Civil Officers	2,376	...	2,376
Nilgiri	5,389	539	27,488
North Arcot	1,866	186	9,519
Civil Officers	...	...	16,750
Presidency	5,963	596	30,417
Civil Officers	...	...	2,542
Salem	1,339	134	6,830
Civil Officers	477	...	6,629
South Arcot	23,953	2,395	1,22,179
Civil Officers	2,154	...	2,354
South Canara	18,326	1,832	93,472
Civil Officers	...	...	2,242
Tanjore	28,795	2,879	1,46,875
Civil Officers	...	...	20,844
Tinnevelly	26,391	2,639	1,34,614
Civil Officers	240	201	22,676
Trichinopoly	20,194	2,019	1,03,006
Civil Officers	...	...	2,915
Vizagapatam	16,626	1,662	84,805
Civil Officers	...	...	12,053
Buckingham Canal	459	46	2,340
Public Works Department	3,91,494	39,139	19,96,619
Civil Officers	10,909	201	1,31,704
Total ...	4,02,343	39,340	21,28,323
Less Grants-in-aid from Provincial to Local ...	...	...	...
	4,02,343	39,340	21,28,323
Profit and Loss ...	...	...	...

APPENDIX E.

Statement of Works referred to in the Buildings and Roads Administration Report for 1878-79.

IMPERIAL.

District.	Work.	Main Head.	Estimate.	Expenditure to end of March 1878.	Appropriation for 1878-79.	Expenditure during 1878-79.
			Rs.	Rs.	Rs.	Rs.
Bellary ..	Double latrine for the European Infantry Regiment.	Military ..	5,765	1,200	2,560	2,640
	Drainage of the married quarters of the European Regiment.	Do. ..	4,810	..	4,810	4,784
	Supply of water to the Cantonment.	Do. ..	1,41,628	1,32,679	..	..
	Double-storied hospital at Poonamallee.	Do. ..	1,02,000	89,607	9,050	9,144
Chingleput ..	Fixing lightning conductors and providing racks to the old laboratory, St. Thomas' Mount.	Do. ..	9,300	..	9,869	9,884
	Purchase of site for Native Infantry Lines at Pondoopetti.	Do. ..	..	30,000	24,830	24,830
	Improvements to the Gun Powder Factory.	Do. ..	54,010	41,240	15,497	15,554
Presidency ..	Lightning conductors to the European Infantry magazines in the fort.	Do. ..	2,330	1,716	614	598
	Napier's Battery	Do. ..	16,610	..	16,882	16,881
	Light-house do.	Do. ..	17,910	..	18,128	18,128
	Clive's do.	Do. ..	9,020	..	6,041	6,041
	Drainage, Native Infantry Lines, Bangalore.	Do. ..	14,150	7,963	8,292	8,187
	Ulsoor water works	Do. ..	65,598	2,681	7,209	7,213
Bangalore ..	Racks in the Ordnance Gun Powder Magazine, fort, Bangalore.	Do. ..	2,560	..	2,208	2,362
	Dismantling the Native Infantry volunteer stop markers and rice-chutti huts, &c., at Bangalore.	Do. ..	2,673	..	2,446	2,373
	Timber bridge over the Waterloo stream at Wellington.	Do. ..	9,480	..	9,465	9,868
Nilgiri ..	Rifle range do.	Do. ..	2,240	330	1,310	2,018
	Swimming bath, European Regiment, at Cannanore.	Do. ..	1,740	1,367	1,360	1,367
Malabar ..	Officers' quarters, West Hill, Calicut.	Do. ..	3,700	..	1,460	2,145
	Raising the floor of European Detail hospital.	Do. ..	2,090	..	2,060	2,068
	Compound wall around contagious disease ward.	Do. ..	1,100	..	1,100	950
Trichinopoly.	Latrine of 16 seats for the men of Royal Artillery.	Do. ..	2,020	..	2,020	1,808
	Sinking a well in the lines of 28th Regiment Native Infantry.	Do. ..	700	186	614	449
	Do. in the lines of the 19th Regiment Native Infantry.	Do. ..	870	222	648	648
Salem ..	Post Office at Yercaud	Civil Buildings.	750	..	275	1,040
Tanjore ..	Do. with Post-master's residence and out-houses at Combaconum.	Do. ..	4,570	..	870	887
	Police lines for the salt guard at Dugarazapatam.	Do. ..	4,200	1,033	1,000	1,356
	Salt road from Great Northern road near Bodilingalapaud.	Do. ..	5,940	2,906	1,063	978
Nellore ..	Road from the Great Northern road near Kavali to the salt platform at Timmulapenta.	Do. ..	23,580	10,003	5,000	4,959
	Stone revetment to the north, east and west slopes of the platform at Sunnapaganta.	Do. ..	2,500	2,131	368	15
	Opening Ennore bar	Do. ..	5,360	..	5,520	5,520
Chingleput ..	Groyne at Ennore	Do. ..	3,200	2,351	1,177	1,176
	Opening bar and constructing temporary groyne at Covelong.	Do. ..	2,550	..	..	1,886
	Excavating Pulicangal drainage channel and building a bridge over it.	Do. ..	4,985	3,551	488	488
South Arcot ..	Thumbalum causeway bridge ..	Do. ..	5,485	..	3,485	3,254
	Improving the Vadaramel canal from Radumlaur bridge to Velangany reach.	Do. ..	10,000	3,951	1,319	1,319
Tanjore ..	One head and fourteen consolidated huts for the salt police, Adirampatam.	Do. ..	7,950	4,597	1,750	1,755
Presidency ..	Madras Harbour Works	Miscellaneous Public Improvements.	..	16,78,346	6,50,421	9,38,575

Statement of Works referred to in the Buildings and Roads Administration Report for 1878-79 —cont.

PROVINCIAL.

District.	Work.	Main Head.	Estimate.	Expenditure to end of March 1878.	Appropriation for 1878-79.	Expenditure during 1878-79.
			Rs.	Rs.	Rs.	Rs.
Ganjam ..	Purchasing the Special Assistant Agent's bungalow at Russelcondah.	Civil Buildings.	4,282	..	4,282	4,282
	Reconstructing the roof of the Police hospital at Kimedy.	Do. ..	1,020	..	1,020	1,020
	Constructing Police huts at Chicacola.	Do. ..	2,072	..	1,950	1,505
Vizagapatam ..	Improvements to the Collector's cutcherry at Vizagapatam.	Do. ..	6,739	5,119	166	1,520
Godavari ..	Additions to the Collector's cutchery at Cocanada.	Do. ..	10,700	..	6,000	4,348
	Improvements to the Head Assistant Collector's cutcherry at Bezwada.	Do. ..	1,940	1,672	445	389
Kistna ..	Additions to the District Munsif's Court-house at do.	Do. ..	3,450	3,265	185	182
	Taluk cutcherry at Salurpett ..	Do. ..	12,830	12,445	670	402
	Do. do. at Venkatagiri ..	Do. ..	12,850	11,439	460	708
Nellore ..	Do. do. at Kunyagiri ..	Do. ..	29,650	30,474	2,500	1,705
	Sub-jail at Kandukur	Do. ..	10,000	8,255	1,000	659
	Do. at Podili	Do. ..	9,700	9,293	407	359
	Taluk cutcherry and subsidiary jail at Madhanapalle.	Do. ..	29,888	28,528	265	244
	Do. do. at Kadiri ..	Do. ..	33,070	28,743	1,763	1,638
Cuddapah ..	Converting the bungalow at Guvalcheruvu into a police station.	Do. ..	1,720	1,252	469	491
	Police station-house at Gundlur ..	Do. ..	1,780	62	680	530
	Do. do. at Thalla Proddutur.	Do. ..	900	..	470	415
	Taluk cutcherry at Koilkuntla ..	Do. ..	68,752	64,521	4,600	3,599
Kurnool ..	Police station-house at Arlagudda ..	Do. ..	430	343	87	85
	Do. do. at Doranala ..	Do. ..	460	369	91	100
Bellary ..	Trinity church at Bellary ..	Do. ..	5,000	..	2,197	2,197
	Constructing a moat and planting an aloe hedge round the compound of Lunatic Asylum.	Do. ..	1,865	1,486	379	378
	Sky-light in the stationery room of the Stamp office.	Do. ..	520	..	519	519
Presidency ..	Converting Chepauk workshop buildings into offices for Public Works Department.	Do. ..	1,20,200	61,056	49,777	49,172
	Lying-in Hospital, Madras ..	Do. ..	1,75,777	30,942	43,000	42,995
	Latrine for the Revenue Board office.	Do. ..	3,550	..	3,533	3,533
Chingleput	Taluk cutcherry at Tiruvallur ..	Do. ..	5,160	..	5,252	5,257
	Bungalow and office for the Assistant Superintendent of Police at Tirukollur.	Do. ..	7,735	6,587	1,143	1,224
South Arcot ..	Police huts for one head constable and three constables at Panrutty.	Do. ..	1,440	..	743	743
	Police station-house at Peenantha ..	Do. ..	860	852	..	8
	Do. do. at Kilianore ..	Do. ..	1,067	..	466	467
	Do. do. at Mailathur ..	Do. ..	1,047	..	1,047	1,011
	Police huts to the Central Jail at Salem.	Do. ..	16,110	15,125	..	209
Salem ..	Police station-house at Thalaivasagapetti.	Do. ..	920	473	293	182
	Verandah, &c., for Collector's cutcherry, Salem.	Do. ..	3,440	2,367	1,133	1,039
	Station-house at Dowlagiri ..	Do. ..	785	145	640	635
	Quarters to the Sub-Collector at Erode.	Do. ..	15,735	6,735	8,950	8,175
Coimbatore ..	Out-houses for the Inspector's quarters at Collegul.	Do. ..	562	..	562	562
Nilgiri ..	Government house at Norwood ..	Do. ..	2,66,660	1,73,395	63,200	63,228
	Jail Superintendent's quarters at Cannanore.	Do. ..	3,100	2,010	3,100	2,010
	Police station-house at Tarriode ..	Do. ..	1,760	825	1,760	825
	Do. do. at Culpathy ..	Do. ..	1,760	1,545	593	428
Malabar ..	Adding a room to the Taluk Cutcherry at Munjery for a Sub-registrar's office.	Do. ..	1,540	607	933	933
	Renewing roof of the out-houses of the Sub-jail at Udipi.	Do. ..	615	187	428	6
Canara ..	Paving the floor of the Sea Custom-house at Mangalore.	Do. ..	375	..	375	375
Trichinopoly ..	Police station-house at Srirangam ..	Do. ..	2,000	..	625	628
Madura ..	Taluk cutcherry at Periyakulam ..	Do. ..	28,936	28,664	228	169

Statement of Works referred to in the Buildings and Roads Administration Report for 1878-79 —cont.

PROVINCIAL—cont.

District.	Work.	Main Head.	Estimate.	Expenditure to end of March 1878.	Appropriation for 1878-79.	Expenditure during 1878-79.
			Rs.	Rs.	Rs.	Rs.
Madura ..	Taluk cutcherry at Pulney ..	Civil Buildings.	23,305	22,732	573	573
	Tirumala Naicks Palace works ..	Do. ..	1,28,629	67,885	15,038	14,937
	Improvements to the Master Attendant's residence at Pamban.	Do. ..	1,500	845	555	381
	Police huts at Mahibatteparai ..	Do. ..	1,490	660	830	677
Tinnevelly ..	Do. at Sathuvarpanullur ..	Do. ..	1,240	..	1,240	205
	Do. at Sathingamullur ..	Do. ..	850	..	850	629
Ganjam ..	Canal from Chilka lake to Ganjam port.	Communications.	1,41,870	1,30,980	5,470	2,995
	New Potinghy ghat	Do. ..	1,30,400	68,568	1,803	284
Vizagapatam ..	Two roads running parallel to the Buckingham canal.	Do. ..	5,341	..	..	5,043
Presidency ..	Extension of the Buckingham canal.	Do. ..	..	25,35,921	1,35,560	5,30,076
Nellore and Chingleput.	Road from Odiamanund to Coonoor.	Do. ..	14,478	4,463	10,015	10,799
Nilgiri ..	Coonoor ghat storm repairs ..	Do. ..	1,450	..	1,450	1,450
	New Pulney ghat	Do. ..	3,20,000	24,705	5,000	5,178
Madura ..	Widening and deepening Cotary mullah.	Miscellaneous Public Improvement.	5,709	4,683	423	423
	Conservancy of the Coonoor ..	Do. ..	2,000	..	2,000	2,001
Presidency ..	Road across the Cochrane's canal near General Hospital bridge.	Do. ..	..	..	1,51	782
	Drainage of land between Vaysaurpady and Cochrane's canal.	Do. ..	11,170	10,822	3,623	7,593
Nilgiri ..	Removing the land slip and restoring the aqueduct at Elk Hill.	Do. ..	5,000	972	2,300	4,277
	Groyne at Cochin harbour ..	Do. ..	1,200	..	1,000	1,199
Malabar ..	Two groynes to protect the foreshore in front of the new Custom-house at Calicut.	Do. ..	2,150	..	..	2,057

SPECIAL.

	New Zillah jail at Vizagapatam ..	Civil Buildings.	23,300	2,403	5,000	4,839
Vizagapatam ..	Hill Jail at Parvatipur	Do. ..	12,820	522	5,000	919
	Taluk school-house at Viravasaram.	Do. ..	4,055	..	4,055	957
Godavari ..	Jail at Gudivoor	Do. ..	37,313	22,398	5,000	353
Kistna ..	Anglo-Vernacular school at Ongole.	Do. ..	9,300	4,326	4,355	2,525
Nellore ..	Laboratory at the Government Farm, Saidapet.	Do. ..	5,450	..	5,450	5,449
Chingleput ..	Improvements to solitary cells for female wards in the Central jail.	Do. ..	1,220	..	1,050	894
	Improvements to the cells for European prisoners, Central jail.	Do. ..	5,750	..	5,750	1,073
Trichinopoly ..	Constructing dead wall into female wards, Central jail.	Do. ..	710	..	710	710
	New Jail at Palamcottah	Do. ..	30,000	16,052	15,000	14,994
Tinnevelly ..	Improving Zillah jail	Do. ..	8,985	..	8,985	6,147
Kurnool ..	Subsidiary jail at Pedalvr	Do. ..	300	190	115	73
Cuddapah ..	Lighthouse at Vakalapudi ..	Miscellaneous Public Improvement.	6,000	5,396	150	218
Godavari ..	Quarters for the Superintendent at Vakalapudi light-house.	Do. ..	3,410	..	3,410	1,963
	Timber groynes on the north side of the sea wall between the rocky islet and the beach at Beypore.	Do. ..	540	..	540	546
Malabar ..	Widening the Cruz Milagre dam ..	Do. ..	3,260	..	3,260	2,213
	Tidal observatory at Beypore ..	Do. ..	1,000	..	1,000	1,000

1879 Cir 94

P.W.

Miscellaneous

From Madras

K/30th Sept.

P.W.D.

RECEIVED

25 Specified

Administration Report of the P.W.D. in the Madras Presy for 1878-79.

15705

No. 64 M.

GOVERNMENT OF INDIA.

All communications should be addressed to the Secretary.

PUBLIC WORKS DEPARTMENT.

Civil Works
Miscellaneous.

To The Secy: to the Govt of Madras.
P.W. Deptt.

Fort William 2nd February 1880.

Sir,

I am directed to acknowledge the Administration report of the P.W. Deptt. of the Madras Presidency for the year 1878-79. I am directed to request that an explanation may be submitted of the large and numerous discrepancies in the figures of outlay - the total outlay of the year shewn in the report being less by upwards of 20 lakhs than that given in the appropriation and outlay account.-

2. I am also desired to ask for an explanation of the statement

made

EXAMINER
No 25 FEB 80
P.W.D.

made at page 9 of the Report that the Buckingham Canal has, under the orders of the Govt: of India, been classed as a Productive Public Work, no orders to this effect being traceable in this Office.-

I have the honor to be,
Sir,
Your most Obedt. Servt.
for Secy: to the Govt of India
C. E.

GB.

EXAMINER
No 25 FEB 80

TO CY/N.

THE FIGURES FOR THE AD-
MINISTRATION REPORT WERE GIVEN BEFORE
THE CLOSE OF THE SUPPLEMENTAL AC-
COUNTS IN WHICH A LARGE AMOUNT OF
FAMINE OUTLAY ETC, WAS ADJUSTED.
HENCE THE DIFFERENCE.

Dr 7/3

OF/G.C.

951

GOVT. OF MADRAS. } 1880. { P. W. DEPT.

SECRETARY.

Fort St. George, 24th July — 1880.

OFFICE NOTE.

To

Please see the enclosed letter from the Govt of India and kindly explain the differences referred to between the figures entered in the Administration Report and the outlay accounts for 1878-79. Of course the former were approximate only as explained in the note at foot of page 3 of the Administration Report.

2

24/7

OF 187

P. W. Department.

No. 5584

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 6th March 1880

READ the following

From

The Govt of India (P.W.) No. 64 dt. 2nd Feby 1880)

Ordered that the

following letter be sent:-

(P.W.) No. 951 dt 6th March 1880

To

The Secy. to the Govt.

of India, P.W.D.

Sir,

I am directed to forward

herewith, for the information of the Govt of India, a copy of the Administration Report for 1879-80 and a copy of the Finance

JM

P. R. Accounts, before the close of the explanatory accounts, in which a large amount of services military was adjusted. This accounts for the discrepancies noticed by the Government of Scotia.

2. With reference to para- graph second, I am to say that the statement with respect to the close of the Prince Edward Island Post Office was inadvertently

Dispatch 10
Post Office
6 Dec 1880
Answered
4/3 4/3

/ Misc 1880 Dept

Misc A-550 & 551 N 96-3-80.