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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 2517 ~~Press~~

~~B.P. No.~~ Mis.

Dated 30-11-1875 ~~196~~ .

Not to be folded or roughly handled

No. 31. Read the following Proceedings of the Board of Revenue, dated 30th August 1875, No. 2,437 :—

Read the following letter from W. McQUHAE, Esq., Collector of Madura, to H. E. STOKES, Esq., Acting Secretary to the Board of Revenue, dated Madura, 24th July 1875, No. 317 : —

I HAVE the honor to submit the annual report on the progress of public works in this district during 1874-75, with the usual detailed statement of work done. I also forward the reports of the Sub-Collector and Head Assistant Collector on the Public Works in their divisions, as directed by Standing Circular No. XXXI. of 1861.

2. The annexed comparative abstract shows that, out of an allotment of Rupees 1,08,385, Rupees 99,678 or 92 per cent. have been spent. This expenditure bears nearly the same proportion as in the previous year, but savings were chiefly effected under the head "New Works" in the items, Civil Buildings, Communications, Agricultural, and Tools and Plant.

Description.	Amount of Allotment for the year 1874-75.	Expenditure of 1873-74.	Expenditure of 1874-75.	Increase.	Decrease.
New Works.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Civil Buildings ...	32,850	46,400 7 7	30,952 15 7	...	15,447 8 0
Communications ...	10,000	37,250 12 2	4,339 0 10	...	32,911 2 4
Agricultural ...	3,000	3,499 15 10	2,667 7 2	...	832 8 8
Salt Works ...	4,880	2,835 8 5	4,170 7 2	1,284 14 9	...
Tools and Plant ...	644	4,425 0 0	628 0 0	...	3,797 0 0
Total ...	51,324	94,461 12 0	42,758 7 9	1,284 14 9	52,988 3 0
Repairs.					
Civil Buildings ...	3,975	3,392 8 7	4,024 3 4	631 10 9	...
Communications ...	8,200	6,023 6 0	8,253 5 11	2,229 15 11	...
Agricultural ...	42,000	42,005 7 2	42,055 15 1	50 7 11	...
Salt Works ...	750	449 3 1	635 3 1	186 0 0	...
Tools and Plant ...	2,136	1,098 0 0	1,951 0 0	853 0 0	...
Total ...	57,061	52,968 8 10	56,919 11 5	3,951 2 7	...
Grand Total ...	1,08,385	1,47,430 4 10	99,678 3 2	5,236 1 4	52,988 3 0
Net decrease ...	...	...	...	...	47,752 1 8

3. NEW WORKS—*Civil Buildings.*—There is a decrease of Rupees 15,447-8-0 under this head against an increase of Rupees 16,937 in the previous year, owing to short expenditure during the year under review on Tirumal Naick's Palace, constructing wards in the vicinity of the new jail at Madura, and construction of

Sub-Magistrates' Cutcherries at Tiruchuli and Muducolattur, &c., many of them having been completed. Except in two or three items, the bulk of the expenditure was made for completing works under progress.

4. *Communications.*—There is a great falling off in the expenditure under this head, which amounts only to Rupees 4,339-9-10, while Rupees 37,250-12-2 were spent in the previous year. This result is due to the very small sum laid out on the Gudalore Ghaut road, and the progress report does not afford any information regarding this short expenditure. The following are the two works executed under this head :—

(1.) Gudalore Ghaut road.
(2.) Deepening the Paumben Channel.

5. *Agricultural.*—The amount spent during the year is Rupees 2,667-7-2, which is less than the expenditure of the previous year by Rupees 832-8-8, and nearly the whole of this sum was utilized in constructing calingulahs and sluices of tanks, all of the ordinary description.

6. The conservancy establishment entertained for the maintenance of the Nelayore Channel has been discontinued under the sanction conveyed in the Board's Proceedings, No. 1,089, dated 30th April 1875.

7. *Salt Works.*—There is an increase of expenditure in this item, amounting to Rupees 1,284-14-9, which is owing to the large amount of Rupees 3,500 having been spent on the construction of eighteen Police huts at the Mutturegunadapatam Salt station. The remainder, or Rupees 670-7-2 of the expenditure, was incurred for erecting a merchant's shed and raising a compound wall at Attengarai, and for an irrigation channel with a sluice at its head to supply sea water to the pans at Viravanadapatam.

8. REPAIRS.—*Civil Buildings.*—A sum of Rupees 4,024-3-4 was laid out on repairs to Civil Buildings against Rupees 3,392-8-7 in the preceding year, the difference being Rupees 631-10-9. The whole of the allotment was utilized. The buildings which received a considerable share are the following :—

		Rs.	A.	P.
1.	Repairing Deputy Tahsildar's cutcherry and cook-room attached to the Subsidiary Jail at Tripatur.	226	6	10
2.	Repairing and improving the Christian Burial-ground at Ramnad	114	9	8
3.	Repairing Government House, No. 4, at Paumben.	362	6	4
4	Do. „ 2, at do. ...	310	0	0
5.	Repairing and improving the Sea Custom Office at Kadakarai	239	13	10
6.	Repairing the District Judge's Court in Tirumal Naick's Palace at Madura	150	0	0
7.	Repairing the Police Constables' huts in the new Jail at Madura	275	0	0
8.	Repairing the Sea Custom Office at Paumben ...	442	6	8
9	Do. the Protestant Church at do. ...	120	0	0
10	Do. the Sub-Collector's Cutcherry and Bungalow at Dindigul...	1,031	4	0

Proceedings of the Madras Government, Public Works Department,
1*st October* 1875.

9. *Communications.*—The expenditure under this head exceeds that of the previous year by Rupees 2,229-15-11, due chiefly to Rupees 2,322-7-3 having been spent on the repair and maintenance of the Gudalore Ghaut road, an item on which no money was spent before. A sum of Rupees 73-1-0 spent on salt branch roads is also included in this item.

10. *Agricultural.*—There is a slight increase under this head, and it is probable that a larger sum would have been spent if funds had been available. The expenditure is a little above the allotment. The money was wholly spent on the repair of tanks and channels as described in the accompanying detailed list. At the same time the wants of the district have not been met, and the District Engineer thinks the old tanks incapable of improvement, their capacity being diminished by gradual silting up. All the channels require masonry work and other improvements, but I see no prospect of getting these works carried out.

11. *Salt Works.*—Rupees 635-3-1 have been spent under this head, showing an increase of Rupees 186. This does not call for any notice.

12. I beg to call the particular attention of the Board to paragraph 11 of the Sub-Collector's report containing his suggestion for the improvement of irrigation in the sub-division, and urging the necessity of detailing a special establishment for the investigation of irrigation projects.

13. I beg to subjoin a statement in the form prescribed in the Circular Memorandum of the Board of Revenue, No. 1,673, dated 14th October 1874, showing the progress of public works as compared with the result of the previous year. It will be seen that no money was spent in the Revenue Department. The expenditure incurred in the Salt Department was not included in this statement, most of the works not falling within the category of buildings and communications.

Progress of Public Works in the District of Madura.

1874-75.

Head of Account.	Whether New Works or Repairs and by what Department the work was executed.	Budget Allotment. Originally sanctioned.	Budget Allotment. Revised Allotment.	Expenditure.
1	2	3	4	5
		Rs.	Rs.	Rs. A. P.
Imperial.				
Public Works Department	New Works	3,000	3,000	2,667 7 2
Revenue Department		...	...	...
Public Works Department	Repairs	50,000	42,000	42,056 13 1
Revenue Department		...	...	...
Public Works Department	New Works	...	...	...
Revenue Department		...	185	140 9 6
Public Works Department	Repairs	...	...	...
Revenue Department		...	...	...
Public Works Department	New Works	...	...	...
Revenue Department		...	...	...
Public Works Department	Repairs	...	...	...
Revenue Department		...	...	...
	Total ...	10,000	10,000	4,339 9 10
Provincial.				
Public Works Department	New Works	43,000	46,850	37,260 0 7
Revenue Department		...	...	...
Public Works Department	Repairs	6,100	7,760	8,180 4 11
Revenue Department		...	...	...
Public Works Department	New Works	33,657	32,850	30,952 15 7
Revenue Department		...	...	...
Public Works Department	Repairs	3,500	3,767	3,883 9 10
Revenue Department		...	...	...
Public Works Department	New Works	80,157	51,350	37,260 0 7
Revenue Department		...	...	...
Public Works Department	Repairs	59,750	62,625	54,260 7 4
Revenue Department		...	...	...
	Total ...	1,39,407	1,13,975	92,220 7 11
	Grand Total ...	1,49,407	1,23,975	96,560 3 9

14. With reference to G. O., dated 16th July 1874, No. 1,174, Financial Department (paragraph 1), I have the honor to annex a comparative abstract of the expenditure incurred by the Public Works agency on Local Fund Works.

Description.	Amount of Allotment for the year 1874-75.	Expenditure of 1873-74.	Expenditure of 1874-75.	Increase.	Decrease.
New Works.					
Communications	Rs. 2,12,420	Rs. 1,39,978	Rs. 1,25,616	Rs. ...	Rs. 14,362
Educational	...	...	...	...	...
Sanitary and Miscellaneous ...	27,998	5,313	10,630	5,317	...
Total ...	2,40,418	1,45,291	1,36,246	5,317	14,362
Repairs.					
Communications	1,21,436	1,16,663	1,00,380	...	16,279
Educational	...	335	...	...	335
Sanitary and Miscellaneous ...	16,694	12,713	9,083	...	3,630
Total ...	1,38,130	1,29,716	1,09,472	...	20,244
Grand Total ...	3,78,548	2,75,007	2,45,718	5,317	34,606
Net decrease ...	...	...	...	...	29,289

15. There is a net decrease of Rupees 29,289 in the expenditure, which is the result of an increase of Rupees 5,317 against a decrease of Rupees 34,606. The increase occurs in the item "Sanitary and Miscellaneous" under New Works, and is due chiefly to the expenditure incurred on the execution of works for the conversion of the jails at Ramnad and Paumben into dispensaries, and on the construction of a dispensary at Perincolum, and the decrease was occasioned by short expenditure under all the other heads.

16. It is to be regretted that the allotments have not been fully utilized as was expected. A list of the principal roads and buildings under construction in the Madura and Dindigul Circles, showing the allotments and expenditure in each

item, is subjoined. It will be seen that, except in a few items, the allotments were not properly spent.

Circles.	Description of Works.	Amount of Estimate.	Allotment for 1874-75.	Expenditure.
	NEW WORKS.			
	Communications.	Rs.	Rs.	Rs. A. P.
Madura	Madura to Rameswaram	78,300	20,200	15,081 2 4
	Do. to Sayelgudi	56,800	21,000	18,545 1 5
	Melur to Sivagungah	16,000	12,000	8,773 11 6
	Manamadura to Parthanur	14,500	13,000	5,956 13 4
	Kariapatti to Pundulgudi	48,000	20,000	12,750 6 0
	Madura to Veralur	7,110	3,942	2,391 1 1
	Do. to Alagarcovil	9,500	3,581	1,742 8 6
	Do. to Tondi	49,300	1,350	1,411 12 2
	Constructing a causeway over the Vigni at Melacka	10,700	6,000	1,634 0 0
	Road from Madura to Nattom	27,000	6,000	779 0 2
	Madura to Allinagaram	27,000	12,000	5,272 14 9
	Branch to Ammainaickenur	4,010	3,000	1,427 11 0
	Palni to Udamalapettai	10,700	7,000	1,360 0 0
	Constructing and repairing tunnels and road dams from Mettair to Pulkanooth	29,281	23,095	20,005 15 2
	Teramangalam to Srivilliputtur	14,240	9,283	10,602 0 0
Dindigul	Dindigul to Butlagundu	24,000	4,000	1,476 0 0
	Do. to Tatchimpoly	14,220	3,000	...
	Masonry works on Road No. 38 from Periacolum to Cumbum	6,060	3,775	1,218 10 4
	Cumbum to Gudalore	4,800	1,443	1,071 12 0
	Periacolum to Cumbum	35,200	853	648 11 4
	Road No. 5 portion between Andipetty and Allinagaram	36,080	98	95 0 0
	Improving road from Dindigul to Aravecurichi	16,000	5,000	1,483 1 7
	SANITARY AND MISCELLANEOUS.			
	Erection of a dispensary at Tirumbuli ...	3,650	5,000	...
	Conversion of a portion of the Perumben Jail into a dispensary	2,700	2,700	2,698 13 0
	Conversion of the old jail at Ramnad into a dispensary	4,650	2,825	2,824 7 0
	Improving the new Chuttrum at Mattanpudal.	2,183	362	364 4 6
	Constructing a verandah to the dispensary at Peromanad	1,375	1,375	1,190 0 0
Tinnevelly	Bungalow at Ammainaickenur	5,000	5,000	49 15 6
	Draining a dispensary at Periacolum	4,960	4,042	1,504 13 2

ENCLOSURE No. 1.—Statement.

From H. W. BLIGH, Esq., Sub-Collector, to W. McCUHAE, Esq., Collector of Madura, dated Kodaikanal, 6th June 1875, No. 181.

I HAVE the honor to submit the usual report on the progress of public works in the subdivision during the past official year.

Proceedings of the Madras Government, Public Works Department,
1st October 1875.

2. The expenditure was as follows:—

Original Works.

	By Public Works Department.	
	Imperial.	Provincial.
	Rs.	Rs.
Civil Buildings	...	5,475
Agricultural	193	...
Communications	...	...
Total ...	193	5,475

Repairs.

	By Public Works Department.	
	Imperial.	Provincial.
	Rs.	Rs.
Civil Buildings	...	1,196
Agricultural	5,072	...
Communications	...	...
Total ...	5,072	1,196

Total... Rs. 11,936

3. The above is exclusive of Local Fund expenditure.

4. There is an increase under all heads of expenditure except under the head Original, Agricultural (Imperial), as compared with the preceding year as shown below:—

		In 1873-74.	In 1874-75.	Difference.
		Rs.	Rs.	Rs.
Original ...	Civil Buildings	5,446	5,475	+ 29
	Agricultural	741	193	— 548
	Communications	...	...	...
Repairs ...	Civil Buildings	243	1,196	+ 953
	Agricultural	3,626	5,072	+ 1,446
	Communications	...	...	...
	Net Increase...	...	...	1,850

5. The following items require brief remark:—

6. ORIGINAL—*Civil Buildings.*—Rupees 427 have been spent on the provision of racks in the new record room of the Dindigul Taluq Cutcherry, which work has, to my mind, been done very roughly and unsatisfactorily, as I frequently told the Range Officer while it was in progress; Rupees 548 on a Police Station-house at Mettur, and Rupees 4,499 on the new Taluq Cutcherry at Palni. The progress made on this latter work has been satisfactory neither in quantity nor in quality; but, as I am aware that the District Engineer has fully reported on the subject to Government, it does not seem to me necessary to enter into details.

7. *Agricultural.*—The petty expenditure under this head has been on tank sluices and on shutters to close tank calingudahs, and has been almost entirely on the completion of works in progress at the beginning of the year.

8. REPAIRS—*Civil Buildings.*—The chief expenditure (Rupees 1,031) has been on the repairs of the Sub-Collector's house and cutcherry at Dindigul.

9. *Agricultural.*—There has been a gratifying increase in the expenditure under this important head. The irrigation works taken in hand and the expenditure on each particular one are, however, generally too small for it to be worthwhile to mention them here, except in the following instances:—

Vaniarapatti Channel	234	In continuation of repairs in hand at the beginning of the year.
Attur Pilnetti Tank	358	
Butlagundu Virankolum	151	In progress.
Do. Vedankolum	362	Completed.
Kalayambuthur Agraharam Athikarikolum	349	Do.
Kothamangalam Puthukolum ...	672	Do.
Palny Pappakolum	379	Do.
Poodur Karusalkolum	728	In progress and about half done.

10. An estimate, amounting to Rupees 9,000, has also been sanctioned for the thorough repair and regulation of the important channel (Vyepar) which supplies the Putur group of tanks and Kothamangalam Puthukolum, upon which a very large revenue is dependent, and to which I have for years vainly invited attention, until the present District Engineer took the matter up. The work is now proceeding rapidly, but, as it was not commenced until March, the expenditure in 1874-75 was trifling.

11. SUGGESTIONS FOR THE FUTURE.—The only one I have to make is that Government should place at the disposal of the District Engineer the services of a competent officer who takes an interest in irrigation, and of a suitable staff of Surveyors to investigate the projects which have from time to time been suggested for the improvement of the sub-division. One is mentioned and discussed in some detail in my letter, No. 71, dated 6th March 1875, and recorded in Board's Proceedings, No. 1,261, dated 12th May 1875. There are others in the neighbourhood of Palni, upon which the District Engineer has already reported to Government and received answer that no officer can be spared; and that before the investigation of new projects is undertaken, existing works should be improved and repaired so as to irrigate their full ayacut. The principle is no doubt good, but like most good principles it may be carried too far, and by rigid enforcement in the face of adverse circumstances may be made positively injurious in its application. It is so in this case. We have in this division a number of works of irrigation, the great majority of which are most petty and not worth, in my opinion, be swept out of the lists altogether, and, with their ayacuts, made over to the ryots at dry rates. Of the remainder, the great majority again are capable of irrigating their full ayacuts or very nearly so; and, where not, generally require such simple and ordinary repairs and deepenings, as a good Maistry should be as capable of superintending as any Engineer. There are, however, a few good systems of irrigation which require different treatment. They are generally in fair order, and, where not, require but simple ordinary occasional repairs such as the regular staff of the district can and do attend to. But there is hardly one of them, which is not, I think, capable of great extension, to the benefit both of the revenue and of the people. These extensions the ordinary staff of the district cannot attend to for want of time; and to insist that they shall be left unrecognized until all ordinary repairs are executed, and all the existing works made to irrigate their full areas of cultivation, seems to me an act of impossibility, which I cannot characterize as I think it deserves lest I should be thought wanting in respect to Government. The facts are, first, that the great majority of our *annaikats* waste and scour to under the weakest petty banks which I say should be made over to the ryots at dry rates; and, secondly, that, as long as the ordinary establishment of the Public Works Department repair one tank, another gets out of repair and demands attention, and that the day will no more come when they will have no ordinary repairs of old works to attend to, and will have time to turn their thoughts and devote their time to extensions and improvements, than will the day when the poor shall cease out of the land. Every day therefore that the investigation of new projects is delayed until the ordinary establishment shall have leisure to take them up is a day lost. It is as if a man had a gold mine on his estate, which he refused to work except when his gardeners had a few spare hours with nothing to do in the garden, or he had not taken his carriage out and his groom had not to clean it. And what I say of the sub-division may with equal truth be said of the whole district. We have now been in peaceable possession of it for three-quarters of a century, and what have we done? We have made a few roads, some passably good, some very bad, in the Government taluqs. In the Zemindaries we have hardly done that. We built a jail a few years ago, so badly that the timbers of the roof sagged enough, almost in a few months, to allow the prisoners to escape through the ventilators. We have not built a single decent public building. Many of our public offices are simple hovels. We have allowed the palace at Madura, one of the grandest and most nobly conceived public buildings I have ever seen, to fall into such a state of ruin that it is doubtful whether any expenditure will ever again make it safe to use. We have allowed great numbers of irrigation works, the legacy of the ancient rulers, to silt up to such an extent that the late Captain Eyres reported that 30 per cent. of the water received in them was wasted, and we have done nothing to replace them. We have indeed spent much money and valuable time on the investigation of the Periyar Project, which there is too much reason to fear is impracticable, and which, even if carried out, would irrigate a portion only of I think only one taluq. For the rest of the district we have not even got to the stage of investigation. In the mean time, the population is increasing at a rate we can hardly as yet do more than conjecture, but which is certainly very great. In a few, a very few, years the whole of the cultivable area will be occupied and no waste left to meet the wants of the growing numbers who have nothing, and can have nothing, in this non-manufacturing country but the land to depend on for their livelihood. As it is, none but inferior land is left uncultivated. Are we to continue to stand still and to let things drift? I humbly venture to think not, and, as a first instalment of better days to come, I ask for the investigation of the natural resources of the district with the view of providing against such waste thereof as I believe now to be of constant occurrence.

12. This report has been delayed pending the receipt from the Public Works Department of the information required to fill up the statement prescribed in the Board's Circular Memorandum, No. 1,678, dated 14th October 1874. It has not yet been received. The statement shall be forwarded as soon as it is.

From L. MOORE, Esq., Acting Head Assistant Collector of Madura, to W. McQUHAE, Esq., Collector of Madura, dated Tammad, 27th May 1875, No. 164.

I HAVE the honor to submit the usual annual report for 1874-75 on the Public Works in this division.

2. *Road No. 2 from Madura to Ramnaveram and Rammad and Pamben.*—The portion of this road from Madura up to the river Vaigai, within a couple of miles of Pasumgudi, is, on the whole, in good order. A few of the culverts are under repair. From the Vaigai up to Rammad it is, however, in a very bad condition. Even in the best weather it is full of enormous ruts and most inconvenient to travel over, and in wet weather it is almost impassable. Portions of this road are now under repair. From Rammad to Mundapam opposite Pamben, it is simply a sandy track which, at the best of times, it is very troublesome to get over. The causeway between Pamben and Rameswaram is reported to be very much out of repair.

3. *Road No. 6 from Madura to Sayiguda.*—This road is in good order up to Kariapatti, about 18 miles from Madura. After that place it is in bad condition.

4. *Road No. 8 from Madura to Tondi.*—This road is in good condition up to Tiruvadanai, from that village to Tondi, about 8 miles, it is in very bad order.

5. *Road No.* 9 *from Dindigul to Tondi viâ Tirupattur.*—This road is reported to be in good order, but the Deputy Tahsildar brings to notice that a number of the avenue trees between Vattanam and Devaeottah have fallen down and should be replaced by young trees.

6. *Road No.* 10 *the Coast Road.*—This road is throughout its entire course in this division in very bad order. In fact, it would be scarcely possible for it to be worse.

7. *Road No.* 12 *from Melur to Pudukotta viâ Tirupattur.*—This road is in good order.

8. *Road No.* 15 *from Tirupattur to Manamadura viâ Sheevagunga.*—This road is in good order throughout.

9. *Road No.* 16 *from Sheevaganga to Elhangudi.*—A small portion of this road is reported to have been repaired recently. The rest is in bad order.

10. *Road No.* 23 *from Karaipatti to Pundalgudi.*—It is reported that this road has been completely repaired, and is in good order.

11. The several Sub-Magistrates report that their offices and sub-jails are in good repair. The only one of them that I have as yet been able to visit, that at Ramnad, is in proper order and clean.

12. The principal wants of this division as regards public works are, so far as I have as yet been able to ascertain, that the road from Permagudi to Ramnad should be put in a thorough state of repair, and that a road should be constructed from Ramnad to its principal seaport, Kilakarai. There is at present, as you are aware, nothing but a sandy track between these places.

Submitted for the information of Government.

2. The total expenditure from Imperial and Provincial Funds was Rs. 99,678 out of allotments aggregating Rupees 1,08,385 or 92 per cent., about the same proportion as in the previous year, in which Rupees 1,47,430 out of an allotment of Rupees 1,52,201 were expended.

The principal items under New Works, Civil Buildings, appear to have been the same as in the preceding year, *viz.*, the restoration of Tirumal Naick's Palace, construction of wards at the new jail, and the provision of office accommodation at certain places; the expenditure during the year on the chief items is given in the margin.

	Rs.
Tirumal Naick's Palace	10,784
Wards at the New Jail	1,492
Sub-Magistrate's Cutchcrry at Tirumalah	993
Do. at Madurollatur ...	666
Cutchcrry at Perneelum	7,836
Do. at Puttu	4,500

The outlay under "New Works," "Communications," was very small as compared with the year before, owing to short expenditure on the Gudalore Ghaut road, *viz.*, Rupees 400 only. The rest of the expenditure was on the Paumben Channel.

3. The outlay on "Repairs" was chiefly under the head of Agricultural; the allotment, Rupees 42,000, having been laid out in the repair of tanks and channels. The Collector states that the wants of the district have not been met, and seems to regard the condition of the irrigation works as very unsatisfactory.

4. With reference to paragraph 12 of the Collector's letter, the Board observe that the question of entertaining a special establishment for the investigation of irrigation projects in the sub-division has been already laid before Government in Board's Proceedings, dated 12th May 1875, No. 1,251, and the proposal negatived in G. O., 1st July 1875, No. 1,836, Public Works Department.

5. The expenditure of Local Funds by the Public Works Department was very unsatisfactory; the proportion of the allotment for New Works (*viz.*, Rupees 2,40,418) expended being only 57 per cent., Rupees 1,36,246; of the allotment for Repairs (Rupees 1,38,130) about 80 per cent., Rupees 1,09,472, was utilized. The Collector expresses regret at this result, but does not assign any particular reason for the shortcoming. The short outlay in the previous year was attributed by the Chief Engineer in his memorandum, recorded in G. O., dated 8th July 1875, No. 1,449, Financial Department, mainly to the weakness of the Public Works Department establishment, and the Board presume that the continuance of a large unutilized balance is due to the same cause.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Sub-Secretary.

No. 32. Order thereon, 1st October 1875, No. 2,838.

ESTABLISHMENT, No. 3.

Communicated to the District Engineer, Madura, who will, it is hoped, with the increased subordinate Local Fund Establishment authorized to be entertained in G. O., No. 2,619, dated 13th September 1875, be able to show more satisfactory progress with the communications of the district.

2. The attention of the Chief Engineer for Irrigation is called to paragraph 3 of the Board's Proceedings.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

To the District Engineer, Madura.
„ Chief Engineer for Irrigation.

Exd. E. C. Shunker.

Spare Copies

PUBLIC WORKS.

THE DISTRICT ENGINEER,
MADURA.

OCTOBER.
Nos 31 32

Rec 4598/75

Proceedings of the Madras Government, Public Works Department,
19th November 1875.

Read the following :—

No. 1,325.

No. 428. MEMORANDUM.

Paragraph 3 of the Proceedings of the Board of Revenue, to which the attention of the undersigned has been directed in G.O., No. 2,838, dated 1st October 1875, refers to the unsatisfactory state of irrigation works in the Madura District, as noticed by the Collector and Sub-Collector in their reports on the progress of Public Works during 1874-75.

2. The Collector states that the wants of the district have not been met; he mentions that the District Engineer thinks the old tanks incapable of improvement, their capacity being diminished by gradual silting up; also it is stated that all the channels require masonry work and other improvements, but he sees no prospect of getting these works carried out. The undersigned is unaware of any reason why much should not be done annually towards providing the channels referred to with such masonry works as they may be found to require. The grant for Minor New Works may not have been large, but the Government have shown every desire to find funds for such purposes, and a considerable increase of expenditure on such works has already taken place in some districts; if the money already given for Madura be utilized, and if its further requirements be brought to notice in a manner admitting of the necessity for increased grants being clearly understood, no doubt the means of the District Engineer for carrying out improvements will be correspondingly augmented. As it is, the District Engineer has stated that he cannot spend the current year's grant for Minor New Works, on such works, and he applied for the transfer of Rupees 1,000 out of Rupees 2,000, which could not be utilized, to investigations of projects, an arrangement which could not be sanctioned; and as money is required in other districts, notably North Arcot, where the wishes of Government as regards the improvement of the condition of irrigation works have been understood and acted upon, the sum surrendered will be utilized elsewhere.

3. The wants of the Madura District in connection with irrigation works are doubtless very numerous. Such is the case in a very great many other districts also, indeed it would be difficult to name a district in which old irrigation works are numerous of which the same may not be said, and evidence of this will have been noticed in the Notes of inspection from time to time submitted from this office. That these wants may not be capable of being met very rapidly in the present state of the Public Works Department may be very true, but the undersigned is of opinion—an opinion based upon what has been found practicable elsewhere—that a very great deal may be done, first in ascertaining what the real wants are, and then in providing for them.

4. The Sub-Collector, Mr. Bliss, is to some extent mistaken in his views of what Government require before the investigation of new projects is undertaken. Certainly, nothing impracticable is required, and it would clearly be impracticable to repair tanks which have silted up considerably so as to enable them to irrigate their full ayacut. What is required is that leaving general assertions on which no action can be taken, the actual condition of existing irrigation works should be ascertained and what can or cannot be done with them determined. For so doing every assistance

requisite can be afforded to the District Engineer by the undersigned on conditions which have been clearly laid down and which are essential; and such assistance is being rendered to other District Engineers from time to time on similar conditions. Money for the purpose is provided in the annual Budgets, and those who take the necessary steps and furnish the requisite information, on which alone the undersigned can sanction expenditure for investigations in connection with the improvement of irrigation works, obtain the means necessary to such investigations.

5. The undersigned has on many occasions stated his opinion that the Engineering Establishment of the Public Works Department is inadequate to the duties it has to perform, and that much advantage would be found in increasing it so that officers of education and intelligence might be available for the work to be done, work which cannot generally be carried out satisfactorily by subordinates even of some executive experience. The department is however still under-officered, and while officiating for Major-General Walker the undersigned had practical experience of the great difficulty which exists of finding officers to fill vacancies and take charge of districts and ranges. For extra work, such as the investigation of projects, it is believed that not one can be made available without direct prejudice to work which cannot be postponed. For such work as the improvement of the irrigation works of Madura, the services of two or three Assistant Engineers would be of great value, and similar remarks would be equally applicable to at any rate Tinnevelly, Trichinopoly, Salem, North Arcot, Chingleput, Cuddapah and Kurnool. Cuddapah, it may be added, has strong claims and has been sadly neglected, its staff has for a series of years been anything but efficient, and yet it is a district in which an adequate establishment of the proper stamp would do excellent service and repay its cost many fold.

6. The Sub-Collector of Madura admits that the ordinary Public Works Establishment of the district cannot do what he desires to see done, *viz.*, the investigation of the resources of the sub-division generally, which are available for the improvement and extension of irrigation, and it may be assumed that he does not wish the existing irrigation works to be still more neglected in order that new projects may be taken up. If the latter are to be undertaken concurrently with increased attention to the former, it follows that additional officers must be made available, and that they must be so at some future time, for nothing can make them so immediately, it will be requisite to arrange for the increase of the Engineering Establishment generally, and to organize it on a scale which will admit of the work which the Government may desire to see carried out being undertaken. A few years back it was too much the practice to divert time and money from existing works to new projects, which were urged on the attention of Government with more or less *prima facie* evidence in their favor. After much discussion it was decided that existing works of irrigation and the interests connected with them had the first claim on such means as the Government had at their disposal. These means were and are confessedly inadequate to the investigation of new schemes as well as the maintenance and ordinary improvement of old works, and so the former have been postponed, and increased attention has been devoted to the latter, a course or policy which will certainly bear good fruit in the long run. Engineers are sometimes credited with a desire to postpone such ordinary work, as the proper maintenance of old tanks and channels, to schemes likely

to effect more noticeable results, so that in advocating attention to what is essential to the security of very extensive interests both public and private, it may be assumed that there must be a very strong conviction of the urgent need of this attention, based upon a considerably extensive knowledge of the actual condition of existing works.

OOTACAMUND, (Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
15*th November* 1875. *Chief Engineer for Irrigation.*
To the Secretary to Government, P.W.D.

No. 429. ORDER THEREON, 19th November 1875, No. 3,300.

IRRIGATION, No. 47.

COMMUNICATED to the Revenue Department with G.O., No. 2,858, of 1st October. Also to the District Engineer, Madura, who is directed to attend strictly to the instructions of the Chief Engineer for Irrigation without further reference to Government. The full strength of the establishment of the Madura District will shortly be made up by transfer, on the arrival of the Assistant Engineers expected from Cooper's Hill, which will permit of the permanent posting to districts of those who arrived last year. And in another year their own services will be permanently available for sub-division or range charges, and the sanctioned Public Works Establishment be for the first time complete.

(True Extract.)

C. Major-General, R.E.,
Secretary to Government.

To the District Engineer, Madura.
" Chief Engineer for Irrigation.

Rd. S. T. Assip.

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NOVEMBER

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