Proceedings of the Madras Government, Public Works Department, 20th February 1875.

No. 508. Read the following endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 25th January 1875, No. 3:—

From J. H. LATHAM, Esq., Chief Engineer and Manager of the Madras Irrigation and Canal Company, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Kurnool, 16th January 1875, No. 6.

December Reports.

I HAVE the honor to enclose* copies of the Upper and Lower Sections Reports together with my own, for the month of December 1874.

* Per Book post.

MADRAS IRRIGATION AND CANAL COMPANY.

MONTHLY REPORT FOR DECEMBER 1874.

Upper Sections.

THERE is little to report for this month. The weather has been fine and dry, and the rivers seem to have fallen to the average level for the month of December as in former years.

I fear the increase in irrigation, which was expected to follow the institution of the new rules and water-rates, has failed in these sections.

The first crops are altogether a little more extended than last year, and it is I think satisfactory that in some cases the increase has been very considerable, while the decrease is confined to certain villages in the Ramalcotta Taluq and a few villages near Nundicotkur.

The floodings which at 1 Rupee per acre amounted to 771·65 last season have been this year superseded by the 2 Rupee rate for dry crops. As yet only 14 acres have been applied for at the latter rate.

It is probable that second crops will be much increased as to area though scarcely as to revenue, for the new rules have reduced the rates.

It is expected that many acres of indigo will require watering either at the rate of Rupee 1 per month per acre or at Rupees 4 per crop.

At present the account stands thus:—

									Acres.
Irrigation	at	Rupees	6	per month	...	...	...	...	2,707·49
Do.	at	,,	5	,,	...	...	...	...	9·76
Do.	at	,,	4	,,	...	...	...	...	340·78
Do.	at	,,	3	,,	...	...	...	...	771·01
Do.	at	,,	2	,,	...	...	...	...	13·91
							Total	...	3,842·95

Applications are now coming in for second crops, and for the gardens, etc., at the monthly rate.

Several repairs will be carried on this month, principally in raising banks to the full height.

The health of the staff has been good during the month.

The nominal roll was passed for payment on the 8th December 1874, and the men were paid from the 8th to 18th December 1874. The rainfall was almost nil.

The usual detailed statement of irrigation is enclosed, with an abstract comparing the seasons, 1873-74 and 1874-75 as to first crops only.

(Signed) C. H. WILKS,
Conservancy Engineer.

MADRAS IRRIGATION AND CANAL COMPANY.

Upper Section.

Comparative Statement of First Crop Irrigation for Seasons 1873-74 and 1874-75.

	Wet, 1st crop, 1873-74.		Wet, 1st crop, 1874-75.		Increase.		Decrease.		
	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	
Ramalcotta Taluq.									
Soonkasala ...	18	60	12	83	...	...	5	77	
Kouthalpaud ...	7	32	3	81	..	...	3	51	
Yedaroor ...	55	99	65	30	9	31	...	...	
Gopala Singavarum ...	52	80	56	71	3	91	...	...	
Nidgoor ...	69	39	97	30	28	11	...	...	
Moongalpaud ...	60	31	62	73	2	42	...	...	
Mamdialpaud ...	58	99	59	41	0	42	...	...	
Roja	15	74	11	22	...	...	...	...	
Kurnool	7	60	7	71	0	11	4	52	
Kulloor	440	75	363	50	...	...	...	...	
Zorapoorum ...	116	72	76	90	...	...	77	25	
Total ...	904	21	817	62	44	23	39	83	
Nundicotkur Taluq.							130	87	Actual decrease 86·59 acres.
Rudravarum ...	63	34	48	03	...	...	15	31	
Poodoor ...	34	93	15	75	...	...	19	18	
Ulloor	15	65	85	51	19	86	...	...	
Satanicota ...	133	89	69	21	...	...	64	68	
Mullayala ...	133	63	108	54	...	...	25	09	
Mudigutla ...	46	74	36	24	...	...	10	50	
Bejiniseemula ...	31	28	11	67	...	...	19	61	
Nagatoor	90	45	68	45	...	...	22	00	
Moorvakonda ...	55	71	69	63	13	92	...	...	
Veerapoorum ...	80	31	85	87	5	06	...	...	
Vellala	16	81	21	67	4	86	...	...	
Moochoomurry ...	423	39	396	83	...	...	29	56	
Palmurry	44	36	20	58	...	...	23	78	
Beeravol	95	78	85	34	...	...	10	44	
Pratacota	149	60	194	54	44	94	...	..	
Puggydial	146	04	103	84	...	...	42	20	
Lutchoomapoorum ...	1	57	1	01	...	...	0	56	
Ganapavarum ...	257	88	333	29	...	...	...	...	
Toomaloor ...	1	00	4	25	75	41	...	...	
Thattipaud ...	37	05	61	94	3	25	...	...	
Bollavarum ...	26	83	27	26	24	89	...	...	
Terrigupully ...	7	30	10	37	0	43	...	...	
Bunnoor	29	08	54	05	3	67	...	...	
Jutoor	93	22	143	42	24	97	...	...	
Chelimela Rudravarum.	143	23	246	51	50	20	...	...	
Pamalpaud ...	158	75	258	01	103	28	...	...	
Tudicherla ...	53	82	30	36	99	26	...	...	
Cumbalpully ...	77	26	74	87	...	...	...	...	
Muddoor	10	38	10	52	...	...	23	46	
Banakacherla ...	3	54	23	14	0	14	2	39	
Wanala	77	61	13	53	19	60	..	...	
Regadigoodoor ...	4	49	47	73	...	...	...	...	
Velapanoor ...	71	38	45	61	43	24	64	08	
Korrapoloor ...	7	13	17	13	...	...	...	...	
Vempenta... ...	...	...	2	72	10	00	25	77	
Total ...	2,626	43	2,776	92	2	72	...	...	
Nundial Taluq.							...	...	
Bilculgoodoor ...	52	67	63	73	549	10	398	61	Actual increase 150·42 acres.
Pesaravoy ...	10	08	51	21	11	06			
Karimadula ...	11	21	60	14	41	13	...	...	
Permatoor ...	8	83	21	68	48	93	...	...	
Kortamuddi ...	...	...	0	84	12	85	...	...	
Bundiatmakur ...	4	26	1	00	0	84	...	...	
Kakanoor... ...	...	...	11	09	...	...	...	...	
Yerraguntla ...	...	...	20	89	11	09	3	26	
Boganum	...	...	12	44	20	89	...	...	
Tirrepaud... ...	12	14	3	19	12	44	...	...	
Booganoor ...	7	55	2	20	...	...	...	...	
Total ...	106	74	248	41	159	23	8	95	
Grand Total ...	3,637	38	3,842	95	753	61	5	35	
							17	56	Actual increase 141·67 acres
							547	04	Actual increase 205·57 acres.

(Signed) C. H. WILKS,
Conservancy Engineer.

Proceedings of the Madras Government, Public Works Department, 20th February 1875.

Upper Section.

Abstract of Applications received up to 4th January 1875.

	Applications received from 3rd December 1874 to 4th January 1875.																		Total up to 3rd December 1874.		Grand total up to 4th January 1875.	
	At Rupees 6.		At Rupees 5.		At Rupees 4.		At Rupees 3.		At Rupees 2.		Special.		Total.									
	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.								
Ramalcotta Taluq.																						
Soonkasala ...	...	...	...	...	...	...	1	50	...	...	...	...	1	50					12	83	12	83
Kouthalpaud ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					8	81	3	81
Yedaroor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					65	30	65	30
Gopala Singavarum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					56	71	56	71
Nidgoor ...	...	...	...	...	...	...	...	06	...	...	...	...	...	96					92	54	92	54
Moongalpaud ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					62	73	62	73
Mamdialpaud ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					59	41	59	41
Roja	...	...	...	...	...	...	...	...	...	...	...	...	...	...					11	22	11	22
Kurnool	...	...	...	...	...	...	...	...	...	...	...	...	...	...					7	71	7	71
Kulloor	...	...	...	...	...	...	...	...	...	...	...	...	...	...					363	50	363	50
Zorapoorum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					76	90	76	90
Total ...	...	...	...	...	...	...	1	50	...	...	...	...	1	50					817	62	817	62
Nundicotkur Taluq.																						
Rudravarum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					46	53	48	03
Poodoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					15	75	15	75
Ulloor	...	...	...	...	...	...	1	84	...	...	...	...	1	84					35	51	35	51
Satanicota ...	...	...	...	...	...	...	0	09	...	...	...	...	0	09					67	37	69	21
Mullayala ...	...	...	...	...	...	...	2	34	...	...	...	...	2	34					39	20	108	54
Mudigutla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					29	09	36	24
Bejiniseemula ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					9	93	11	67
Nagatoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					38	03	68	45
Moorvakonda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					51	64	69	63
Veerapoorum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					85	87	85	37
Vellala	...	...	...	...	...	...	...	...	...	...	...	...	...	...					21	67	21	67
Moochoomurry ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					325	79	396	53
Palmurry	...	...	...	...	...	...	...	...	...	...	...	...	...	...					11	15	20	53
Beeravol	...	...	...	...	...	...	...	...	...	...	...	...	...	...					83	62	85	34
Pratacota	...	...	...	...	...	...	...	...	2	72	...	...	2	72					166	86	194	54
Puggydial	...	...	...	...	...	...	...	...	...	...	...	...	...	...					99	78	103	84
Lutchoomapoorum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					1	01	1	01
Ganapavarum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					333	29	333	29
Toomaloor ...	...	...	...	...	...	...	...	...	...	20	...	...	2	20					2	05	4	25
Thattipaud ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					61	94	61	94
Bollavarum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					27	26	27	26
Terrigupully ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					10	37	10	37
Total ...	...	...	...	...	...	...	4	05	2	92	...	...	6	96					812	66	817	62

Abstract of Applications received up to 4th January 1875.—(Concluded.)

Applications received from 3rd December 1874 to 4th January 1875.	At Rupees 6.		At Rupees 5.		At Rupees 4.		At Rupees 3.		At Rupees 2.		Special.		Total.		Total up to 3rd December 1874		Grand total up to 4th January 1875.	
	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.	Acres.	Cents.
Nundicodkur Taluq.—(Concld.)																		
Dunnoor ...	...	...	...	...	9	76	...	...	...	...	...	...	9	76	44	29	54	05
Jutoor ...	...	...	...	...	...	...	...	...	...	...	...	...	4	12	139	80	143	42
Chelimela Rudravarum	...	...	...	...	0	...	...	...	00	...	...	...	...	...	246	51	246	61
Jamalpaud	...	...	...	...	3	57	...	12	...	...	...	...	3	25	254	76	258	01
Tudicherla	...	...	...	...	...	15	3	68	...	...	...	...	3	15	27	21	30	36
Cumbelpully	...	...	...	...	5	07	...	...	...	...	...	...	6	17	74	87	80	87
Buddoor	1	10	...	...	...	...	...	...	...	...	...	...	...	...	4	55	74	52
Bussakacherla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23	14	23	14
Wanala ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	58	13	53
Rogadigoodoor	...	...	...	...	8	64	...	...	...	...	...	...	...	...	47	43	47	43
Velapanoor	...	...	...	...	2	72	...	...	...	...	...	...	...	...	45	61	45	61
Korrapoloor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	49	17	13
Vempenta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	72
Total ...	201	89	55	...	09	20	03	7	92	...	284	...	93		2,491	99	2,776	93
Nundial Taluq.																		
Bilenlgoodoor ...	...	...	...	...	49	0	01	...	...	...	...	...	...	...	54	33	63	73
Peenravoy ...	...	...	...	...	79	1	27	...	...	...	...	...	...	...	46	15	51	21
Karimadula ...	...	...	...	...	...	2	07	...	...	...	...	...	...	...	60	14	60	14
Permatoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	61	21	63
Kortamuddi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	84	0	84
Bundatmakur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	00	1	00
Kalanoor ...	...	...	...	...	55	0	11	...	...	...	...	...	...	...	11	09	11	09
Yerragunla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	23	20	23
Doganum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	44	12	44
Tirrepaud ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	19	3	19
Doogunoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	20	2	20
Total ...	...	...	12	68	83	4	36	7	92	...	17	307	19	09	231	22	248	41
Grand Total ...	201	89	68	...	82	23	45	7	92	...	307	...	09		3,535	87	3,842	95

(Signed) C. H. WILKS,
Conservancy Engineer.

Statement showing the Revenue of last year compared with the Expense of the Conservancy Staff.

Receipts.	Amount.	Expenditure.	Amount.
	Rs. A. P.		Rs. A. P.
Regular Irrigation	65,777 4 2	*Conservancy Staff.*	
Miscellaneous Revenue.		Upper Division ... Rs. 34,447 10 4	
Upper Division ... Rs. 771 7 10		Lower do. ... „ 37,382 5 6	71,829 15 10
Lower do. ... „ 538 8 5	1,310 0 3	NOTE.—No contingencies are included in the above.	
Estimate of Sums paid to the Treasury direct by the Collector.		Estimated balance to carry to Special repairs and General Management ...	895 11 4
Kurnool water-rate ... Rs. 4,000 0 0			
Coontahs filled ... „ 605 15 1			
Company's land cultivated „ 1,000 0 0	5,605 15 1		
Proceed of land—*vide* G. O., No. 2,351, of 23rd September 1873, (an adjustment entry)	32 7 8		
Total ...	72,725 11 2	Total ...	72,725 11 2

KURNOOL,
15th *January* 1875.

(Signed) J. H. LATHAM,
Chief Engineer and Manager.

REPORT FOR THE MONTH OF DECEMBER 1874.

Main Canal.

THE work done to the Main Canal during the month has been chiefly repairs to the banks and tow-path, such as filling in cracks and ruts in the slopes formed by the rains, etc. In the 9th and 10th sections all the injuries done by the floods of October last have been repaired except those to the North and South Pennair flood banks, which cannot be done until the water has dried up out of the side pits.

2. The repair of the Pennair anicut has yet to be done, as it was not until near the end of the month that the river was sufficiently low to allow of their being commenced without incurring unnecessary expense in baling or pumping out the water from the holes made in the upper wall, but I have been able to ascertain that the injury done by the late floods is confined to removing about two-thirds of the coping, and to the scouring out two holes in the upper wall and apron, one 66 feet and the other 45 feet long. Extending in each case nearly to the second wall, and not so deep as to have done any injury to the wells on which the superstructure is founded, the repairs will therefore be easy.

Distribution Works.

3. Considerable progress has been made in forming reticulation channels for the second crops and floodings in the Kurnool District, also in constructing many road crossings over secondary channels, and in repairing and metalling those made in former years.

Irrigation.

4. The first crops have been all cut throughout the Nundial, Sirwell, and Koilguntla Taluqs, and the outturn is considered satisfactory; second crops and floodings have made considerable progress, for, according to the tickets received by the end of the year, there have been sown 354 acres of paddy and 64 acres of floodings in those taluqs, but the latter have only just commenced.

5. In the Cuddapah District a few fields have been cut in Prodatur Taluq, but no second crops of paddy have yet been sown, and the ryots seem to prefer sowing raggi and cummin seed, both of which I expect will require canal water over a considerable extent during this next two months.

6. Owing to my being still unable to ascertain with any accuracy the amount of irrigation in Cuddapah Taluq, I cannot yet give any reliable account of the total spread of wet irrigation in these lower sections.

7. My Overseers and Amins had been doing their best to supply water tickets to all ryots asking for them in the Cuddapah District, and to measure those fields where water was taken without applications made; but on the 3rd December I received a letter from the Deputy Collector of Cuddapah requesting me to discontinue giving the ryots tickets in order that his Curnums might prepare the canal cultivation accounts, but up to this time I have received no such statements from any of the Revenue authorities, though according to Rule XIV. such a statement should be forwarded to the Chief Engineer from the Tahsildar at the commencement of every month.

General.

8. On the 8th and 11th of December, Colonel Moberly inspected and counted all the stores at Admapully and Dhoor; very few deficiencies were found at either station. During the month I took count of all the plant at Admapully, and Mr. Dunphy did the same at Ayaloor, Jutoor, and the other stations in his range; as soon as I can find time to count those at Dhoor, my report on the whole will be forwarded.

9. From the 21st to the end of the month I was at Kurnool for the Christmas holidays, but Mr. Dunphy remained at Ayaloor in charge during my absence.

10. The rainfall at Dhoor during December was only 0·02 inches; none was recorded at any other station.

DHOOR,
8th January 1875.

(Signed) A. J. DODSON,
Conservancy Engineer.

Chief Engineer's Report to accompany the Divisional Reports for December 1874.

THE work done in going over old ground and making thoroughly good all canal banks, road-bridges over channels, and indeed the whole range of works, small and great, has been work from its nature making little show, one may say *none* in proportion to the thought and personal attention required, but the whole effect has now become very striking; and three seasons of such work have given the canal itself, and all the Company's outlying property, a finish already worthy of the importance of the project as a bulwark against national famine and a boon to the local villagers. It may be confidently predicted that three years more will see a similar advance, and especially in the improvement of the tow-path by metalling, the establishment of better system in managing the timber growing on the Company's land, and the fencing of the canal.

2. I enclose a statement showing the revenue of last year compared with the expense of the conservancy staff, showing practically an equality. The character of the irrigation during the current year seems to be, in the Kurnool District, a falling off, or loss of buoyancy in the irrigation of old villages, coupled with a somewhat timid trial of it in new villages, the balance being in favor of increase. The above applies to first crop only, and indicates that there would have been a falling off had it not been for the vigorous extension and improvement of channels in the 5th and 6th sections during the last two years. I believe we are indebted to the Deputy Collector for the commencement of irrigation in many of the villages newly reticulated in Nundial Taluq.

3. In the Prodatur Taluq, in Cuddapah District, there has been no extension of channels to new villages, for Mr. Dodson informs me that such extensions are confined to the northern villages of the Cuddapah Taluq; but in the Prodatur Taluq the increase of irrigation is about 75 per cent. In that taluq the water has been supplied on demand made through the Company's Overseers.

4. The subject of navigation was discussed for three days by the Divisional Engineers and myself, and all the details of probable expense worked out. The result was a modification of some of the plans which had been prepared. My whole time, available from absolutely necessary work, has been given to carrying this out; and I feel confident of being able to give the result of our deliberations in the course of a fortnight.

KURNOOL,
12th January 1875.

(Signed) J. H. LATHAM,
Chief Engineer and Manager.

SUBMITTED for the information of Government.

(Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 509. ORDER THEREON, 20th January 1875, No. 493.

IRRIGATION, No. 35.

ORDERED to be recorded.

2. The exertions of the Special Deputy Collector are noticed with satisfaction.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Chief Engineer for Irrigation.
" " and Manager of the Madras Irrigation and Canal Company.
" Revenue Department.
" Collector of Kurnool.
" " of Cuddapah.

Exd. W. J. Lewis.

Spare Copies.

No. 3.

Submitted for the information of Government.

Fort St. George. } Lieut Col. R.E. Officiating Chief Engineer for Secy:
25th Jan. 1875

To

The Secretary to Government
P. W. Department.

W.J.R.

Irrigation P. W. Dept.

Proceedings of the Madras Government
Read the following -

From
The Chief Engr. for Irrigation (Ltr. No. 3 of 25th Jany. 1875)

493

Ordered to be re-
corded.

The Ln. 25/1/75
Equations
of the Chief Engr.
Dept. Cost are
noted with satisfaction
MM

To the Chief Engr. for Irrigation
" Engrs. of the N. & S. Divns.
" Revenue Department
" Collector of Kurnool
" " Cuddapah

Dept. 28-2-75

P. W. Dept.
Ger. (Irrigation) Branch
No. 3

From
The Chief Engr. for Irrigation
To The Secretary to Govt.
P.W.D.

Dated 25th January 1875
Received 28th January 1875
No. 584

Enclosure 54

Submits for information a
report on the proposed
Irrigation & Canal works
Canal for the Kurnool
Cuddapah District.

Dec. 1874.

Ch. 508
Ger. 1-2-75

Ger. 493-10-2-75

584

Govt. of {1875} Madras.

PUBLIC WORKS.

No.

The Chief Engineer
Irrigation.

Date.

Recd. Encl. 5

G. O. 20 Feby 1875, No. 493

Mon. 508-509

Madras Irrigation
and Canal Company.

The report on the works
which ——— for the month
of December 1874, recorded
the exertions of the Special
Dy Collector noticed
with satisfaction.