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# MADRAS RECORD OFFICE.

Government of Madras.

*Public Works* DEPARTMENT.

|          |             |       |
|----------|-------------|-------|
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Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
28th October 1864.*

No. 550. Read the following letter from Captain J. MULLINS, R. E., Consulting Engineer for Irrigation and Canal Company, to Colonel C. A. ORR, R. E., Secretary to Government, Department Public Works, dated Madras, 14th October 1864, No. 123 :—

SIR,

1. I have the honor to forward the following report on the progress made, on the works of the Irrigation and Canal Company, during the quarter ending 31st January 1864.

2. The expenditure on the Soonkasala anicut and head works was Rupees 15,168-15-8, of which Rupees 14,083-6-0 were for 7,188½ cubic yards of masonry, and Rupees 1,085-9-8 for special superintendence and sundries.

3. Rupees 23,163-11-5 were spent on the Hindry aqueduct, the items being :—

|                                                 | RS.    | A. | P. |
|-------------------------------------------------|--------|----|----|
| Excavation, baling and filling in ... ..        | 62     | 3  | 4  |
| Rubble stone in chunam, cub.c yards 583½ ... .. | 3,173  | 6  | 4  |
| Cut-stone " 70 ... ..                           | 965    | 8  | 6  |
| Arch work in chunam " 2,617 ... ..              | 13,176 | 8  | 5  |
| Centrings ... ..                                | 4,675  | 12 | 5  |
| Special superintendence and sundries ... ..     | 1,115  | 4  | 5  |

4. On the 1st Section of the Main Canal from the 1st to 17½ miles the outlay was Rupees 29,072-5-1. The work done being :—

|                                                                     | RS.    | A. | P. |
|---------------------------------------------------------------------|--------|----|----|
| Excavation, cubic yards 57,131 ... ..                               | 11,664 | 15 | 6  |
| Embankment " 85,691 ... ..                                          | 10,461 | 6  | 0  |
| Revetting interior banks with rough stone, cubic yards 2,838 ... .. | 2,586  | 5  | 8  |
| Culverts ... ..                                                     | 1,042  | 0  | 0  |
| Calingulah, cubic yards 53 ... ..                                   | 849    | 14 | 0  |
| Special superintendence and sundries ... ..                         | 2,467  | 11 | 11 |

5. The 2nd and 3rd Sections of the Main Canal from the 18th to 43rd miles show an outlay of Rupees 1,07,251-9-10, and the items are :—

|                                             | RS.    | A. | P. |
|---------------------------------------------|--------|----|----|
| Excavation, cubic yards 37,620 ... ..       | 16,211 | 6  | 0  |
| Embankment " 2,77,434 ... ..                | 47,592 | 13 | 0  |
| Calingulah " 906 ... ..                     | 3,357  | 13 | 0  |
| Culvert " 1,397 ... ..                      | 5,725  | 2  | 8  |
| Masonry bund " 1,068 ... ..                 | 2,550  | 14 | 9  |
| Masonry wall " 2,758 ... ..                 | 9,499  | 4  | 2  |
| Bridges " 154 ... ..                        | 957    | 8  | 0  |
| Tunnels " 252 ... ..                        | 304    | 0  | 0  |
| Revetment " 7,793 ... ..                    | 9,002  | 10 | 0  |
| Syphon sluice " 70 ... ..                   | 251    | 0  | 0  |
| Alteration of road ... ..                   | 368    | 0  | 0  |
| Special superintendence and sundries ... .. | 11,422 | 2  | 3  |

6. On the 4th and 5th Sections of the Canal from the 44th to 72nd miles there was an expenditure of Rupees 73,753-15-7, the details being,

|                                                        | RS.    | A. | P. |
|--------------------------------------------------------|--------|----|----|
| Excavation and embankment, cubic yards 4,51,180 ... .. | 52,741 | 4  | 5  |
| Bridge, cubic yards 127 ... ..                         | 3,858  | 7  | 1  |
| Calingulah " 898 ... ..                                | 4,468  | 14 | 7  |
| Culvert " 269 ... ..                                   | 5,159  | 2  | 4  |
| Scouring sluice ... ..                                 | 732    | 1  | 1  |
| Special superintendence and sundries ... ..            | 6,794  | 2  | 1  |

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7. On the 6th Section, or miles 73rd to 91st of the Canal, Rupees 28,653-14-0 were spent on,

|                                                      | RS.    | A. | P. |
|------------------------------------------------------|--------|----|----|
| Excavation and embankment, cubic yards 50,527 ... .. | 10,637 | 12 | 6  |
| Single and double culvert ... ..                     | 2,950  | 12 | 5  |
| Locks ... ..                                         | 8,869  | 10 | 6  |
| Bridge ... ..                                        | 1,648  | 14 | 4  |
| Sluice, &c. ... ..                                   | 16     | 13 | 0  |
| Special superintendence and sundries... ..           | 4,531  | 15 | 3  |

8. The outlay on the 7th Section, miles 92nd to 114th amounts to Rupees 16,830-7-1, being for,

|                                                        | RS.    | A. | P. |
|--------------------------------------------------------|--------|----|----|
| Excavation and embankment, cubic yards 1,58,519 ... .. | 11,446 | 2  | 6  |
| Anicut and head work ... ..                            | 1,267  | 8  | 0  |
| Aqueduct ... ..                                        | 13     | 12 | 0  |
| Regulating lock ... ..                                 | 69     | 0  | 0  |
| Culverts ... ..                                        | 386    | 13 | 2  |
| Calingulabs ... ..                                     | 37     | 6  | 0  |
| Bridges ... ..                                         | 378    | 10 | 11 |
| Special superintendence and sundries ... ..            | 3,231  | 2  | 6  |

9. On the 8th Section, miles 115th to 146th there was an expenditure of Rupees 10,741-10-1. The particulars being :—

|                                                        | RS.   | A. | P. |
|--------------------------------------------------------|-------|----|----|
| Excavation and embankment, cubic yards 1,01,658 ... .. | 7,931 | 4  | 8  |
| Locks ... ..                                           | 190   | 6  | 4  |
| Special superintendence and sundries ... ..            | 2,619 | 15 | 1  |

10. The anicut and head works at Somaiswaram show an expenditure of Rupees 2,366-12-10, consisting of Rupees 462-0-7 on the body of the anicut; Rupees 500-7-0 on Railway; and Rupees 1,404-5-3 on account of special superintendence and sundries.

11. The expenditure on works of "Distribution" was Rupees 45 only, and that on "Buildings" was Rupees 1,430-8-1, consisting of Rupees 170-4-0 on the office and store at Chintacoontah, Rupees 764-4-6 and 495-15-7 on those at Puggidial and Jupaud respectively.

12. The following abstract shows the expenditure on all works from the commencement to the close of the quarter, compared with the sanctioned estimates.

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| Works.                                                                                           | Amount of the Estimate. | Expenditure up to 31st October 1863. | Cost in the quarter ending 31st Jan. 1864. | Total expenditure. | Deduct Refunds. | Total net Expenditure. | Amount     |                        |
|--------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------|--------------------------------------------|--------------------|-----------------|------------------------|------------|------------------------|
|                                                                                                  |                         |                                      |                                            |                    |                 |                        | Available. | In excess of estimate. |
|                                                                                                  | RS.                     | RS.                                  | RS.                                        | RS.                | RS.             | RS.                    | RS.        | RS.                    |
| <b>MAIN SUPPLY.</b>                                                                              |                         |                                      |                                            |                    |                 |                        |            |                        |
| Anicut and head works at Kurnool ... ..                                                          | 3,03,080                | 64,711                               | 15,169                                     | 64,711             | .....           | 64,711                 | 2,38,369   | 1,48,659               |
| Do. at Soonkasala ... ..                                                                         | 1,25,000                | 2,58,490                             | 2,367                                      | 2,73,659           | .....           | 2,73,659               | .....      | 1,48,659               |
| Do. at Somaiswaram ... ..                                                                        | 1,62,470                | 7,166                                | 23,169                                     | 9,533              | .....           | 9,533                  | 1,52,937   | 48,052                 |
| Aqueduct across the river Hindry at Kurnool ... ..                                               | 1,45,000                | 1,69,883                             | .....                                      | 1,93,052           | .....           | 1,93,052               | .....      | 1,59,289               |
| Canal for one mile from the head sluice of the Kurnool anicut ... ..                             | 65,000                  | 49,211                               | .....                                      | 49,211             | .....           | 49,211                 | 15,789     | .....                  |
| South Main Canal, 1st Section 17½ miles ... ..                                                   | 4,60,000                | 5,90,217                             | 29,072                                     | 6,19,289           | .....           | 6,19,289               | .....      | .....                  |
| Do. 2nd and 3rd Section from 17½ to 42nd miles..                                                 | 7,22,500                | 5,90,994                             | 1,07,252                                   | 6,97,346           | .....           | 6,97,346               | 25,154     | .....                  |
| Do. 4th and 5th do. from 43rd to 72nd " ... ..                                                   | 5,43,835                | 3,71,902                             | 73,754                                     | 4,45,656           | .....           | 4,45,656               | 98,179     | .....                  |
| Do. 6th do. from 73rd to 91st " ... ..                                                           | 3,84,434                | 50,145                               | 28,656                                     | 78,801             | .....           | 78,801                 | 3,05,633   | .....                  |
| Do. 7th do. from 92nd to 114th " ... ..                                                          | 2,38,460                | 23,091                               | 16,830                                     | 39,921             | .....           | 39,921                 | 1,98,539   | .....                  |
| Do. 8th do. from 114th to 146th " ... ..                                                         | 4,37,410                | 5,536                                | 10,742                                     | 16,278             | .....           | 16,278                 | 4,21,132   | .....                  |
| Total Main Supply ... ..                                                                         | 35,87,189               | 21,80,446                            | 3,07,011                                   | 24,87,457          | .....           | 24,87,457              | 14,55,732  | 3,56,000               |
| <b>DISTRIBUTION.</b>                                                                             |                         |                                      |                                            |                    |                 |                        |            |                        |
| Branch channels and sluices between the 1st 17½ miles of the 1st Section South Main Canal ... .. | 5,520                   | 3,486                                | 45                                         | 3,531              | .....           | 3,531                  | 1,989      | .....                  |
| <b>BUILDINGS.</b>                                                                                |                         |                                      |                                            |                    |                 |                        |            |                        |
| Central Hospital with out-houses and compound wall at Kurnool..                                  | 2,540                   | 3,787                                | .....                                      | 3,787              | .....           | 3,787                  | .....      | 1,247                  |
| Office, Store-house and Workshop at Soonkasala ... ..                                            | 4,000                   | 7,563                                | .....                                      | 7,563              | .....           | 7,563                  | 605        | 3,563                  |
| Do. and Artificer's shed at Bowanassy ... ..                                                     | 7,466                   | 6,861                                | .....                                      | 6,861              | .....           | 6,861                  | .....      | 3,868                  |
| Roads and bridges at Bowanassy ... ..                                                            | .....                   | 3,868                                | .....                                      | 3,868              | .....           | 3,868                  | .....      | 1,245                  |
| Central Office, Overseers' hut ... ..                                                            | .....                   | 1,245                                | .....                                      | 1,245              | .....           | 1,245                  | 605        | .....                  |
| Office and temporary store sheds, &c., at Ayalur ... ..                                          | 642                     | 37                                   | .....                                      | 37                 | .....           | 37                     | 1,628      | 1,925                  |
| Permanent office and store at Jupaud in Nagatore, Division                                       | 2,240                   | 116                                  | 496                                        | 612                | .....           | 612                    | .....      | .....                  |
| Office and Store at Puggidial ... ..                                                             | .....                   | 1,161                                | 764                                        | 1,925              | .....           | 1,925                  | 2,515      | .....                  |
| Office and Store at Chintacoontah in the Kundar Division                                         | 2,685                   | .....                                | 170                                        | 170                | .....           | 170                    | 5,353      | 11,848                 |
| Total Buildings ... ..                                                                           | 19,573                  | 24,638                               | 1,430                                      | 26,068             | .....           | 26,068                 | 14,63,074  | 3,67,848               |
| <b>Grand Total</b> ... ..                                                                        | 36,12,282               | 22,08,570                            | 3,08,486                                   | 25,17,056          | .....           | 25,17,056              | .....      | .....                  |

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13. This Statement shows that the expenditure of the quarter was Rupees 3,08,486, and the total outlay Rupees 25,17,056.

14. The subjoined Statement shows the expenditure in excess of sanction to be Rupees 3,67,848, this is Rupees 68,058 more than that noticed in my last report. All the items of excess have however been covered by subsequent sanctions, except the first four items under the head of Buildings, and these were commented on by Government in their Order No. 2,616 of the 9th September 1864, reviewing the report for the 1st quarter of 1863-64:—

| Works.                                                  | Excess expenditure up to 31st Oct. 1863. | Excess expenditure during the quarter ending 31st Jan. 1864. | Total.   | Deduct Refunds. | Net expenditure up to 31st January 1864. |
|---------------------------------------------------------|------------------------------------------|--------------------------------------------------------------|----------|-----------------|------------------------------------------|
| RS.                                                     | RS.                                      | RS.                                                          | RS.      | RS.             | RS.                                      |
| <b>MAIN SUPPLY.</b>                                     |                                          |                                                              |          |                 |                                          |
| Anicut and head works at Soonkasala.                    | 1,33,490                                 | 15,169                                                       | 1,48,659 | .....           | 1,48,659                                 |
| Aqueduct across the river Hindry at Kurnool.            | 24,883                                   | 23,169                                                       | 48,052   | .....           | 48,052                                   |
| South Main Canal, 1st portion of the 1st Section.       | 1,30,217                                 | 29,072                                                       | 1,59,289 | .....           | 1,59,289                                 |
| <b>BUILDINGS.</b>                                       |                                          |                                                              |          |                 |                                          |
| Central Hospital at Kurnool ...                         | 1,247                                    | .....                                                        | 1,247    | .....           | 1,247                                    |
| Office and Store at Soonkasala...                       | 3,563                                    | .....                                                        | 3,563    | .....           | 3,563                                    |
| Roads, bridges, &c., at Bowanassy.                      | 3,868                                    | .....                                                        | 3,868    | .....           | 3,868                                    |
| Central Office, Overseer's shed...                      | 1,245                                    | .....                                                        | 1,245    | .....           | 1,245                                    |
| Office and Store at Puggydial in the Nagatore Division. | 1,161                                    | 764                                                          | 1,925    | .....           | 1,925                                    |
| Total ...                                               | 2,99,674                                 | 68,174                                                       | 3,67,848 | .....           | 3,67,848                                 |

15. The expenditure on works including special superintendence and sundries was as above shown Rupees 3,08,486, this superintendence amounting to Rupees 31,672-4-5 or 12 66 per cent. The cost of the permanent Establishment debited to construction was for the same period Rupees 56,879 or 20-77 per cent., but

|                        |       |       |
|------------------------|-------|-------|
| * Pennair Division ... | RS.   | A. P. |
| Bellary do. ...        | 8,050 | 2 5   |
| Gundacottah Survey ... | 8,324 | 8 10  |
|                        | 1,366 | 10 8  |

deducting the pay of those Establishments\* which were engaged exclusively on survey operations, this part of the superintendence cost 14 29 per cent., so that the percentage of special and permanent Establishments engaged on works was 26-956. The percentage of the controlling Establishment for this quarter was 7-124. Subjoined are the particulars of the cost of permanent and special temporary Establishments in the several Divisions, from which it will be observed

† Including sundries.

that the cost of the temporary Establishment† employed on the Somaiswaram anicut during this quarter continued to be out of all proportion to the expenditure on work, and in the Kundar Division it was more than 32 per cent.

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|                                                    | SUPERINTENDENCE. |             |             | Expenditure on construction including temporary superintendence. | Remarks.                                                               |
|----------------------------------------------------|------------------|-------------|-------------|------------------------------------------------------------------|------------------------------------------------------------------------|
|                                                    | Permanent.       | Temporary.  | Total.      |                                                                  |                                                                        |
|                                                    | RS. A. P.        | RS. A. P.   | RS. A. P.   | RS. A. P.                                                        |                                                                        |
| Hindry Division including Soonkasala Sub-Division. | 9,022 14 1       | 16,090 12 3 | 25,113 10 4 | 1,74,707 0 0                                                     | * Including Rs 45 spent on distribution work in the first Section.     |
| Nagatore and Bowanassy Division ...                | 13,260 4 2       | 14,557 3 10 | 27,817 8 0  | 1,20,500 0 0                                                     | † Including Rupees 1,200 for Office buildings at Jupaud and Puggydial. |
| Kundar Division ...                                | 6,855 5 4        | 2,619 15 1  | 9,475 4 5   | 10,912 0 0                                                       | † Including Rs. 170 for Office at Ayalore.                             |
| Nellore Division including Somaiswaram anicut ...  | 9,999 10 1       | 1,404 5 3   | 11,403 15 4 | 2,367 0 0                                                        |                                                                        |
| Total ...                                          | 39,138 1 8       | 34,672 4 5  | 73,810 6 1  | 3,08,486 0 0                                                     |                                                                        |

16. The following estimates were submitted to, and sanctioned by Government during the quarter:—

|                                                                                                                                   | RS.    |
|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| Plan and estimate for an Hospital and Apothecary's residence at Somaiswaram ...                                                   | 2,000  |
| Repairs to the Bowanassy Station buildings ...                                                                                    | 168    |
| Converting the unfinished building of the Gun Powder Manufactory into an Hospital, and an Apothecary's residence at Bowanassy ... | 427    |
| Improving the Bowanassy station road and repairing the culverts on it ...                                                         | 578    |
| Supplemental estimate of the Somaiswaram anicut...                                                                                | 29,470 |
| Office and Store at Jupaud in Nagatore Division ...                                                                               | 2,240  |
| Escape channel for culverts Nos. 5 and 6 in the 5th section south main canal ...                                                  | 654    |

No. 551. ORDER THEREON, 28th October 1864, No. 3,104.

1. Ordered to be communicated to the Home Government.
2. The attention of the Chief Engineer will be requested to the Consulting Engineer's remarks in the latter part of paragraph 15.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,  
Secretary to Government.

To the Consulting Engineer, Irrigation and Canal Company.  
„ Manager for do. do.

Exd. T. O'Connor.

Consulting Engineer's Office,  
Irrigation & Canal Company  
Madras, 14 October 1884

N. 123.

Sir,

Captain, J. Mullins, R.E.

Consulting Engineer & C. Co.

To

The Secretary to Government  
Department of Pub. Works.

Sir,

1. I have the honor to forward the following  
Report on the progress made, on the works of the  
Irrigation and Canal Company, during the Quarter  
ending 31<sup>st</sup> January 1884. -

2. The expenditure on the Coonkacala Anicut  
and head works was Rupees 15,168-15-8 of which  
Rupees 14,083-6- were for 7,188 1/2 cubic yards of ma-  
sonry and Rupees 1,085-9-8 for special superintendence  
and sundries. -

3. Rupees 23,168-11-5 were spent on the Hindry  
Aqueduct, the items being,

Excavation boring and filling in Rs. 62-3-4 1/2  
Rubble stone in chinam ch. 2,258 1/2 cu yds 3,173-6-4  
Cut stone ----- do 70 ----- 965-8-6  
Arch work in chinam ----- do 2,647-13-17 1/2 8-5  
Centrings ----- do 1,675-12-5  
Special superintendence and sundries. 1,115-4-5

4. On the 1<sup>st</sup> section of the Main Canal from the  
1<sup>st</sup> to 17 1/4 miles the outlay was Rupees 29,072-5-1. The  
work done being,

Excavation cubic yards 57,131- Rs. 11,664-15-6  
Embankment ----- 85,691 ----- 10,461-6-  
Revetting

Revetting interior banks with rough stone emb. 2238-2526.58 Reest.  
 Culverts 1062-2  
 Calingulah emb. yards 53 844-4  
 Special superintendence and sundries 2467-11-11

5. The 2<sup>nd</sup> and 3<sup>rd</sup> sections of the Main Canal from the 18<sup>th</sup> to 43<sup>rd</sup> miles when an outlay of Rupees 107254-9-10, and the items are,

Excavation emb. yards 37620- Rupees 16211-6-"  
 Embankment 277434 47572-13-  
 Calingulah 906 3357-13-  
 Culvert 1397 5725-2-8  
 Masonry bund 1068 2559-16-9  
 Masonry wall 2758 9499-4-2  
 Bridges 154 957-8-  
 Tunnels 252 304-  
 Revetment 7793 9002-10-  
 Syphon sluice 70 251-  
 Alteration of road 368-  
 Special superintendence and sundries 11422-2-3

6. On the 4<sup>th</sup> and 5<sup>th</sup> sections of the canal from the 44<sup>th</sup> to the 72<sup>nd</sup> miles there was an expenditure of Rupees 73753-15-7- the details being,

Excavation and embankment emb. 457120 Ru. 53741-4-5  
 Bridge 124 3252-7-1  
 Calingulah 828 4363-16-7  
 Culvert 289 3159-2-4  
 Masonry sluice 782-1-1  
 Special superintendence and sundries 6796-2-1

7. On the 6<sup>th</sup> section or miles 73<sup>rd</sup> to 91<sup>st</sup> of the canal Rupees 28655-14- were spent on

Excavation and embankment emb. 50527 Reest. 10637-12-6  
 Single and double culvert 2950-12-5  
 Sluice 8869-0-6  
 Bridge 1643-14-6  
 Sluice &c. 16-13-  
 Special superintendence and sundries 4531-15-3

8. The outlay on the 7<sup>th</sup> section miles 92<sup>nd</sup> to 114<sup>th</sup>

amounts to Rupees 16030-7-1- being for Reest.  
 Excavation and embankment emb. 158519 11446-2-6  
 Amient and head work 1267-8-  
 Aqueduct 13-12-  
 Regulating lock 69-  
 Culverts 386-13-2  
 Calingulah 37-6-  
 Bridges 378-10-11  
 Special superintendence and sundries 3231-2-6

9. On the 8<sup>th</sup> section miles 115<sup>th</sup> to 146<sup>th</sup>; there was an expenditure of Rupees 10741-10-1. The particulars being,

Excavation and embankment emb. 101658 R. 257 7931-4-8  
 Locks 190-6-4  
 Special superintendence and sundries 2619-15-1

10. The Amient and head works at Samaiswaram when an expenditure of Rupees 2366-12-10- consist- ing of Rupees 462- -- 7 on the body of the amient Rupees 500- 7- on railway, and Rupees 1404-5-3 on account of special superintendence and sundries.

11. The expenditure on works of "distribution" was Rupees 45 only, and that on "Buildings" was Rupees 1430-8-1-, consisting of Rupees 170-4- on the office and store at Chintacootah- Rupees 764-4-6, on those at <sup>and 475-15-7</sup> <sup>Supra</sup> and <sup>respectively</sup> <sup>and 475-15-7</sup>

12. The following abstract shows the expend- iture, on all works from the commencement to the close of the quarter, compared with the sanctioned estimates. -

# Works.

## Main Supply.

|                                                                |        |
|----------------------------------------------------------------|--------|
| Amient and head works at turnool.                              | 303080 |
| do do at Soonkaxala                                            | 125000 |
| do do at Somaiswaram                                           | 162470 |
| Aqueduct across the river Hindy at turnool.                    | 145000 |
| Canal for one mile from the head sluice of the turnool Amient. | 65000  |
| South Main Canal 1st section 17 1/4 miles                      | 460000 |
| do 2nd 3rd do from 17 1/2 to 42 1/2 mile                       | 722500 |
| do 4th 5th do from 43 to 72                                    | 543835 |
| do 6th do from 73 to 98 1/2                                    | 384434 |
| do 7th do from 98 1/2 to 114                                   | 238460 |
| do 8th do from 114 to 146                                      | 437410 |

Total Main Supply - 3587109

## Distribution.

|                                                                                               |      |
|-----------------------------------------------------------------------------------------------|------|
| Branch channels and sluices between the 1st 17 1/4 miles of the 1st section South Main Canal. | 5520 |
|-----------------------------------------------------------------------------------------------|------|

## Buildings.

|                                                              |      |
|--------------------------------------------------------------|------|
| Central Hospital with out houses & compound wall at turnool. | 2540 |
| Office, store house & workshop at Soonkaxala.                | 4000 |
| do do & artificers shed at Romanaxey.                        | 7466 |
| Roads and Bridges at Romanaxey                               |      |
| Central office Overseers' hut.                               |      |
| Office and temporary store sheds for at Ayalar.              | 642  |
| Permanent office and store at Supandi in Nagasore Dist.      | 2240 |
| Office and store at Pungydia.                                |      |
| Office and store at Chintacavantal in the Hindar Division    | 2685 |

Total Buildings - 19573

Grand Total Expend. 3612282

| Expenditure to 31st Oct/03. | Cost in the quarter ending 31st Jan/04. | Total Expenditure | Debit Refunds. | Total Credit Expenditure | Amount available | Amount in excess of estimate. |
|-----------------------------|-----------------------------------------|-------------------|----------------|--------------------------|------------------|-------------------------------|
| 64711                       |                                         | 64711             |                | 64711                    | 238369           |                               |
| 258490                      | 15169                                   | 273659            |                | 273659                   |                  | 148659                        |
| 7166                        | 3367                                    | 9533              |                | 9533                     | 152937           |                               |
| 169883                      | 23169                                   | 193052            |                | 193052                   |                  | 48052                         |
| 49211                       |                                         | 49211             |                | 49211                    | 15789            |                               |
| 590217                      | 29072                                   | 619289            |                | 619289                   |                  | 159289                        |
| 590094                      | 107252                                  | 697346            |                | 697346                   | 25154            |                               |
| 371902                      | 73754                                   | 445656            |                | 445656                   | 98179            |                               |
| 50145                       | 28656                                   | 78801             |                | 78801                    | 305633           |                               |
| 23091                       | 16830                                   | 39921             |                | 39921                    | 198539           |                               |
| 5536                        | 10742                                   | 16278             |                | 16278                    | 421132           |                               |
| 2100426                     | 307011                                  | 2487437           |                | 2487437                  | 1455732          | 356000                        |
| 3486                        | 40                                      | 3531              |                | 3531                     | 1989             |                               |
| 3787                        |                                         | 3787              |                | 3787                     |                  | 1247                          |
| 7583                        |                                         | 7583              |                | 7583                     |                  | 3563                          |
| 6864                        |                                         | 6864              |                | 6864                     | 605              |                               |
| 3868                        |                                         | 3868              |                | 3868                     |                  | 3868                          |
| 1245                        |                                         | 1245              |                | 1245                     |                  | 1245                          |
| 37                          |                                         | 37                |                | 37                       | 605              |                               |
| 116                         | 496                                     | 612               |                | 612                      | 1628             |                               |
| 1161                        | 764                                     | 1925              |                | 1925                     |                  | 1925                          |
|                             | 170                                     | 170               |                | 170                      | 2515             |                               |
| 24638                       | 1430                                    | 26068             |                | 26068                    | 5353             | 1828                          |
| 2208570                     | 308486                                  | 2517056           |                | 2517056                  | 1463074          | 367828                        |

B. This statement shows that the expenditure of the quarter was Rupees 308486- and the total outlay

on May Rupees 2517056.

14. The subjoined statements show the expenditure in excess of sanction to be Rupees 367848, this is Rupees 68058 more than that noticed in my last Report. All the items of excess have however been covered by subsequent sanctions, except the first four items under the head of Buildings, and these were commented on by Government in their order No. 2616 of the 9th September 1904, reviewing the report for the 1st Quarter of 1903/04.

| Works.                                             | Excess expenditure up to 31st Oct/03. | Excess expenditure during the quarter ending 31st May/04. | Total.        | Excess of expenditure up to 31st May/04. |
|----------------------------------------------------|---------------------------------------|-----------------------------------------------------------|---------------|------------------------------------------|
| <u>Main Supply.</u>                                |                                       |                                                           |               |                                          |
| Ambient and head works at Sontkasala.              | 133490                                | 15169                                                     | 148659        |                                          |
| Aguedut across the river Hindry at Kurnool.        | 24883                                 | 23169                                                     | 48052         | 48052                                    |
| South Main Canal - 1st portion of the 1st section. | 130217                                | 29072                                                     | 159289        | 159289                                   |
| <u>Buildings.</u>                                  |                                       |                                                           |               |                                          |
| Central Hospital at Kurnool.                       | 1247                                  |                                                           | 1247          | 1247                                     |
| Office and Store at Sontkasala.                    | 3563                                  |                                                           | 3563          | 3563                                     |
| Roads - Bridges &c at Romanasay.                   | 3868                                  |                                                           | 3868          | 3868                                     |
| Central Office - Overseers &c.                     | 1245                                  |                                                           | 1245          | 1245                                     |
| Office and Store at Puggolal in the Nagar.         | 1164                                  | 764                                                       | 1928          | 1928                                     |
| <b>Total Rupees</b>                                | <b>299674</b>                         | <b>68174</b>                                              | <b>367848</b> | <b>367848</b>                            |

15. The expenditure on works including special superintendence and sundries was as above shown Rupees 308486. This superintendence amounting to Rupees 34672-4-5 or 12.66 per cent. - The cost of

\* Penamur & Bellary District Survey - 1366.10.8

of the permanent establishment allotted to construction was for the same period Rupees 56879 or 20.77 per cent but deducting the pay of those establishments which were engaged exclusively on survey operations this part of the superintendence cost 14.29 per cent, so that the percentage of special and permanent establishments engaged on works was 26.456. - The percentage of the controlling establishment for this quarter was 7.124. - Subjoined are the particulars of the cost of permanent and special temporary establishments in the several divisions, from which it will be observed that the cost of the temporary establishment employed on the Romanasaywaram Ambient during this quarter continued to be out of all proportion to the expenditure on works in the Kurnool Division it was more than 32 per cent.

|                                                     | Permanent | Temporary  | Total      | Remarks. |
|-----------------------------------------------------|-----------|------------|------------|----------|
| Hindry Division including Sontkasala Amb. Division. | 9022 16 1 | 16090 12 3 | 25113 10 4 | 174707   |
| Nagar and Romanasay Division                        | 13260 4 2 | 11557 3 10 | 24817 7 0  | 120500   |
| Kurnool Division                                    | 6855 5 4  | 2619 15 1  | 9475 4 5   | 10912    |
| Nellore Division including Romanasaywaram Ambient.  | 9999 10 1 | 1404 5 3   | 11403 15 4 | 2367     |

Rupees 39138 1 8 34672 4 5 593810 6 1 308486

The following estimates were submitted to and sanctioned by Government during the quarter.

Plan

Plan and estimate for an Hospital and  
 Apothecary's residence at Somaiwaram Rs. 2000-  
 Repairs to the Bomnassay Station buildings - 168-  
 Converting the unfinished building of the  
 Gun Powder Manufactory into an  
 Hospital and an Apothecary's residence } 427-  
 at Bomnassay.  
 Improving the Bomnassay Station Road and  
 repairing the culverts on it. } 548-  
 Supplemental estimate of the Somaiwaram  
 Office and Store at Dupans in Nagabore Rs. 2240  
 Escape channel for culverts - Rs. 586 } 654  
 in the 5<sup>th</sup> section - South Main Canal.

I have the honor to be  
 Yours most obedient servant,  
 Lieutenant Captain R.E.  
 Lane Engineer & Co. Company.

Whitehead  
 25th Dec/64

219 2104

1. Contract to be entered  
 into to the Government.

2. The attention of the  
 Chief Engineer will be  
 requested to the contract  
 being Engineers' Remarks  
 in the latter part of  
 page 15.

All

To the Secretary of the  
 "Engineers' B. & C. Co."  
 1883  
 Dec 21 - 1883

Dr. J. P. D. & Co  
1000 Broadway  
New York

To, General George B. Smith  
Secretary of Government

C. P. M. H. K.

Oct 14 }  
Received 17 }  
October 1864

Subscribed Progress  
Report for the Quarter  
ending 31<sup>st</sup> January 1864

£12 3 10 1/2 - 28 1/2 28 1/2 64

No 558. 557

With an order.