

(1) Number of pages _____

(2) Date of repair _____

3. Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 386 (2)	Press Mis.
Dated 3-2-	1877.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
3rd February 1877. No. 386.*

No. 140. Read the following letter from Lieutenant F. S. SHEPHERD, R.E., to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated London, 23rd June 1876:—

With reference to G.O., No. 592, dated 6th March 1876, I have the honor to report as follows:—

1. The Government Order above quoted, with enclosures, was received at the India Office on the 24th April, but was not forwarded to me until the 20th instant.

2. I will now proceed to notice in detail the various statements made by Mr. Randall, which will be found to be full of inaccuracies, and to be in many cases based on erroneous suppositions.

3. With reference to the notes on Ragavacharry's claim for Firewood, No. 1. Mr. Randall appears to have complicated the account unnecessarily by introducing matter which has nothing whatever to do with the claim. The only question at issue is the quantity of firewood supplied to the contractor by the Tahsildar. The accuracy of the Tahsildar's accounts was not disputed as long as I remained in India. If it had been shown to be wrong, I should not have made the deduction.

I have before explained* that the deduction of Rupees 1,000 for tools and firewood was 5 per cent. on the total value of Rupees 20,000. The delay in deducting the full total of 2,551½ bandy-

loads was owing to the fact that I had not previously received the Tahsildar's accounts. The account prepared by Overseer Hamilton of 1,427 bandy-loads has nothing whatever to do with Ragavacharry's accounts. It relates to the quantity of wood used in burning bricks departmentally; consequently Mr. Randall's conclusions, based on this account, are absurd. It is evident that the only cause of dispute is the inaccuracy of the Tahsildar's account.

4. *Tools, No. 2.*—I have nothing further to add to my explanation regarding this item in paragraph 10 of my previous letter.

5. *Anicut Foundations, No. 3.*—Mr. Randall omits to notice that the contractor accepted the corrections made in the certificate for June 1870, and which I have already explained arose from mistakes in the Overseer's measurements. Mr. Randall is mistaken in supposing that the excavation for north head sluice constitutes a double payment. This is not the excavation for the *foundations* of the sluice, but for the body of the work, which the percentage allowed was not intended to cover.

In the account of the sum to be paid to the contractor, as well as in criticising my measurements, Mr. Randall makes two erroneous suppositions. It is assumed that the foundations were laid at an extra depth, whereas the fact is that they were laid at a depth of 7½ feet instead of 10½ feet, or three feet *less* depth.

It is further assumed that Ragavacharry completed the foundation work. This was very far from the actual fact. A large portion of the excavation for rough stone apron and lower retaining wall, &c., was executed after Ragavacharry stopped work.

To quote Mr. Randall's own words, I may say that "I was not prepared to find such gross and palpable errors" in Mr. Randall's accounts.

In fact, Mr. Randall has committed the very fault of which he accuses me. His measurements are extracts from the estimate, and he has not deducted the portion of

work left incomplete. There is, however, too little time to say more; the fact that whatever mistakes I made is no excuse that I committed them in my good intentions.

6. *Aurifer*, N. 4.—Here Mr. Russell has been working since the middle of May.

6. *Aurifer*, No. 4.—Here Mr. Blackall has allowed the engraver to deceive him completely. The wood was paid for at the rate of European paper, because it was inferior both in quality and quantity, and only fit for the worst European standard paper.

¹ Paragraph 6 of proposed article 2

the number of bricks actually supplied at the agreed rate of 25 cents per 1,000. The detailed account on which this statement was based shows a balance of \$1,000.00 in Hamilton's account of 1,427 barrels of material ordered by the Firewood No. 1, and Mr. Hamilton's account is supported by the statement of the Overseer's account is supported by the statement of the Overseer's account.

This account was finally closed about June 1961, and was given the credit of the contractor as long as I remained in the country. When the situation changed, however, the contractor to re-open the question of my salary. I received a letter from the

* Memorandum No. 76-13, from the Chief Engineer for Irrigation, dated 12-11-33, per 1673.

charry himself or with his Agent - The sum of \$2,000.00 was paid to the Agent as an over-payment.

7. South Channel, No. 2.—The final measurements of this channel show the work was fully completed from 0 to 100 feet, both according to the original and the damage estimates. There is therefore no question about the correctness of the portion. It should be recollected that each of the different certificates shows the total quantity of work executed up to date, and not merely the work executed during each month. The measurements, with few exceptions, correspond to this total, and the mistake that has been made is the clerical one of adding together the total quantity of work executed as shown in the certificates for May, June, and July. The total of the measurements attached to the September certificate is evidently the correct total for which payment should have been made; but the amount already paid for in July has been added to it in the office. This is simply a clerical error.

In this certificate, which is the last so far as the work is concerned, the amount of payment for the south channel is \$1,000.00.

In this certificate, which is the last on which the contractor received any payment for the south channel, credit is given for the full amount of the estimate from 0 to 12,500 feet, and a deduction of 39,200 cubic yards is made for temporary work. The measurement thus only shows that the contractor excavated earthwork between 0 and 12,500 feet to the extent of 12,443 cubic yards, which total is no doubt well within the mark.

Such a clerical error

Such a clerical error was very difficult for me to detect, because all the earth-work of the whole project was included in one total in the contract certificate, and it was not until the work register was prepared that the mistake was evident, and deserved to be considered "gross and palpable" as Mr. Randall expresses it.

Mr. Randall implies that my final accounts for the project were not correct, and that the inaccuracy of which he speaks was due to my failure to include the earth-work of the whole project in the contract certificate. This is a very serious charge, and I must state that I have no recollection of having made such a mistake. The earth-work of the whole project was included in the contract certificate, and I have no doubt that it was included in the work register as well. The mistake was a clerical error, and I am sure that it was not intentional. I am sure that I have been very careful in my accounts, and I am sure that I have been very honest in my dealings with the project. I am sure that I have been very diligent in my work, and I am sure that I have been very thorough in my accounts. I am sure that I have been very careful in my dealings with the project, and I am sure that I have been very honest in my dealings with the project. I am sure that I have been very diligent in my work, and I am sure that I have been very thorough in my accounts.

Mr. Randall implies that my final accounts for the channel are based on these accounts, the inaccuracy of which I pointed out before I left. This is not the case. Mr. Randall does not attempt to point out any errors in my final account of the total quantity of work executed on this channel; but prepares his account in a different

manner, and shows a difference in the contractor's favor of Rupees 741-11-5. Without the details I cannot explain the difference, but I have little doubt that it amounts to a double payment.

3. *Aulur Branch Channel, No. 6.*—Here a correction is made of Rupees 40, said to be due to clerical errors.

9. *Turfing, No. 7.*—I have already explained this question in paragraph 8 of my previous letter. It was, of course, very careless of Mr. Bell to measure up and water turfing not satisfactorily completed; but, as the contractor agreed to do the work to *my* satisfaction, I cannot understand why I should be obliged to accept work passed by Mr. Bell. Both Colonel Roberts, R.E., and Mr. Randall agreed with me in refusing payment for this item, while I was on the spot and had an opportunity of explaining; but after my departure, Mr. Randall changes his mind and declares that the contractor has been hardly used.

10. *Poricur Channel, No. 8.*—Some work was done by the contractor on this channel in 1869, but all trace of it was washed away by the flood of the following November, and no claim was made for payment up to the time I left India in March 1873. The contractor was only authorized to cut sections one yard broad at every 500 feet, and to mark out the centre line of the channel. Probably the total value of the work was under Rupees 50; but if the contractor had sent me his claim I could have prepared an accurate estimate of the value of work he was authorized to execute from the levels taken at the time, and orders issued.

11. *Kanam Channel, No. 9.*—Mr. Randall states that only 10,172 cubic yards were executed out of a total deduction of 12,861 cubic yards. This was owing to the fact that the drop at 17,000 feet was afterwards raised, which made it unnecessary to excavate the channel to the full depth allowed for in the estimate for some distance above this work.

12. *Kulsagarapatnam Road Bridge, No. 10.*—Mr. Randall's statements are inaccurate. The original measurements show the depth of foundation to have averaged 5 feet. The entry of 6 feet in a subsequent certificate was an error in copying. I never had an opportunity of measuring this depth myself, because there was always too much water in the channel. I therefore paid for it according to the original measurements which were made by Mr. Bell.

13. *Tricalore Syphon Shuices*, No. 11.—*Wide* paragraph 7 of my letter above quoted.

14. *Tricalore Bridge, No. 12.*—The earth excavated from the foundations to piers, &c., was used up in raising the approaches. The contractor has been allowed 5 per cent. for excavating foundations and sundries and for actual work done in raising the approaches. I think it will be found that there was no separate allowance for raising the approaches in the original estimate. The claim for Rupees 99-15-6 is therefore inadmissible.

15. *Kadamba Head Sluice, No. 13.*—The deduction of Rupees 7-8-0 was made on account of inaccuracies in the former calculations, not on account of errors in the measurements, as stated by Mr. Randall.

16. *Forieur Head Sluice, No. 14.*—Calls for no remark.

17. *Anmapuram Culinguloh, No. 15.*—Here Mr. Rundall is decidedly wrong in admitting the claim for Rupees 175-15-4. The work not measured was rejected.

18. *North Channel, No. 16.*—The estimate for the north channel, as Mr. Hughes states, commenced from the old head sluice, the estimate for removing which and excavating earth up to that point is included under the head of north head sluice. The admission of Rupees 116-8-5 therefore constitutes a double payment. I cannot understand Mr. Rundall's reasoning about the errors in calculation. The contractor should of course be paid according to whichever estimate is correct.

19. *Marathony Tank, No. 17.*—Mr. Rundall does not give any reasons for the difference of Rupees 14-11-3 between his account and mine.

20. *Puthu and Pottakulam Tanks, No. 18.*—Mr. Rundall fails to show that any over-payment was made on this work. The deduction for sand amounts to 16,685 cubic yards. This is not for sand alone, but for good soil that had to be removed in order to get at the sand. If this be paid for as good soil at 2 Annas per cubic yard, instead of being deducted at 1 Anna per cubic yard, the contractor should be credited with an additional 16,685 cubic yards at 3 Annas = Rupees 3,128-7-0, and sundries at 5 per cent., Rupees 156-6-9; total Rupees 3,284-13-9. Mr. Rundall, in his second account, only deducts Rupees 56-10-0 for sand. Full credit is given to the contractor for all the work executed under the damage estimate in the first account. The credit of Rupees 235 for restoring the tank from 0 to 1,500 feet is therefore inadmissible. The item of Rupees 209-2-0 appears objectionable for the same reason. The second account further assumes that the whole of the damage done by the flood from 0 to 8,000 feet was allowed to the contractor. This was not the case; only the principal breaches were measured. Of course the whole of the work done under the damage estimate should be disallowed in the second account, because full credit has been given for it in the first account. The correct distance is 10,600 feet. Mr. Hughes probably measured it as 10,692 feet in measuring over the unfinished and irregular bund. At any rate the portion to be deducted is from 10,600 feet to the end.

21. *Korumpullum Tank, No. 19.*—Payments for earthwork must either be made on pit measurements, or credit must be given for the amount allowed for in the estimate and a deduction made for incomplete work. When anything happens to prevent the pits from being measured, the latter mode of payment is the only alternative. Mr. Rundall implies that no deduction was made for incomplete work. That such deductions were made is clearly shown under the south channel and also in the Puthu and Pottakulam tanks, where Mr. Rundall admits that full credit was not given for the 1st and 12th tanks. If any mistakes were made under this system of payment, it must have been in the quantity deducted for incomplete work. However, after October 1869, up to the time I left India, I never paid for any incomplete earthwork unless obliged to take it over in that state from the contractor. This precaution eliminated the chance of making such mistakes.

A careful examination of the accounts will show that the contractor was not charged with the cost of removing the bund from 24,475 feet to the end. In fact it was not determined to remove this portion until some time after his account was closed.

The admission of Rupees 375-10-0, with sundries at 5 per cent. is therefore an over-payment. No doubt the difference of Rupees 1,195, shown in Mr. Rundall's second account, may be explained in the same way as in the preceding paragraph; but here the details of sand, &c., are not given. I may mention, however, that the contractor removed a good deal of sand rejected in the first 3,000 feet, which has of course been omitted in the accounts.

I showed conclusively before I left, when the question was brought forward by the contractor's agent, that any apparent discrepancies between the several measurements of these three tanks were amply accounted for by the removal of rejected sand and the damage caused by the flood of 1869.

22. *Yearl Syphon Sluice, No. 20.*—Calls for no remark.

23. *Arumugamungalam Double Dam, No. 21.*—These measurements were, I believe, delayed on account of water in the channel.

24. *Culingulohs in Marathony and Pottakulam Tanks, No. 22.*—Calls for no remark.

25. *Temporary Head Sluice, No. 23.*—Here a payment is made in 1874, because Mr. Hughes believes that a bund of some kind was put across the channel in 1870.

26. *Materials, No. 24.*—The stone used in completing this work departmentally was excavated from the neighbouring Tuhukun channel, and had been already paid for under that head. The claim for Rupees 156-14-6 is therefore inadmissible.

27. *Level and Sundries, No. 25.*—I cannot understand what has induced Mr. Rundall to change his mind about this item. The deduction could not have been made long ago, because no payments whatever were made to the contractor after July 1870, and for most of the earthworks no payments were made after October 1869. Mr. Rundall must be aware that there are many things connected with levelling, such as clearing the line and cutting trenches to mark out the work, value of pegs, &c., which have nothing to do with lascars. I never had more than four lascars, an establishment sanctioned by Government. I cannot therefore understand what Mr. Rundall means by the enormous establishment of lascars. There were also one or two ancient peons. The contractor generally supplied the coolies required for such work, and has only been charged for the instances in which he failed to do so.

This item was not disputed while I was in India. As this sum of Rupees 396-3-8 is deducted on account of portions of work executed and paid for departmentally on works for which the contractor has been given full credit, including 5 per cent. for sundries, the admission of the claim constitutes a double payment.

28. *Baling for Anicut.*—This question appears to have been left open.

29. I think I have clearly shown that Mr. Rundall has failed to prove any inaccuracies in my final accounts, beyond a few slight clerical errors, if even that. An over-payment was made on the Overseer's measurements for the anicut foundations, but this was corrected and accepted by the contractor long before he stopped work, and four years before Mr. Rundall investigated the subject. The only over-payment not recovered when the contractor stopped work was on the south channel. This I have explained to be due to a clerical error and not to mistakes in the measurements.

Proceedings of the Madras Government, Public Works Department,
3rd February 1877. No. 336.

Mr. Rundall complains that I was very reticent in giving detailed information. This is ridiculous. All the details were in the office and might have been examined if required.

Mr. Rundall's statements about my system of measurements in 1869, (now seven years ago, and five years before the date of that officer's investigations) have been shown to be altogether unsupported by facts.

No. 141.

ORDER THEREON, 3rd February 1877, No. 386.

IRRIGATION, No. 12-A.

ORDERED to be recorded.

(True Extract.)

Lieut.-Colonel, R.E.,

P. C. Form No. 22.

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the

Read the following :—

From
Lieut. F. C. Shepherd R.E. (H.E. dated 23rd June 1877)

His Grace the Governor in Council is of opinion that Lt. Shepherd's explanations do not dispose of the main and important allegation that Certificates were granted by him to the late Contractor Pannacharry purporting to be for completed work within certain limits, when the work for which the payments were really made was incomplete and lying within other limits.

Chd. for Engr.
Lt. Shepherd - R.E.
R. J. Pannacharry

27/1

5783

1877
PUBLIC WORKS.

Date
To
By

5-2-77

19

to 5th St. No. 350

No. 140-141

5-2-77

Steequantum Ancient
Works. Summary of
Letter from A. H. ...
... giving further explana-
tions in connection with
the —, recorded

Buff. Am. Rep.