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MADRAS RECORD OFFICE.

Government of Madras.

Judicial DEPARTMENT.

Cons 13 to 57

G.O. No. 1911 Press Mis.

42-43

Dated 10-7- 1857.

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 13th October 1857.

No. 42. Read the following Extract from the Proceedings of the Chief Engineer, dated 5th October 1857, No. 4201.

Read the following letter from Captain F. H. RUNDALL, District Engineer, Godavery Division; to Colonel C. E. FABER, Chief Engineer, dated Camp at Dowlaishweram, 26th September 1857, No. 573.

SIR,

With reference to Extract Minutes Consultation No. 1724, dated 9th Instant, I have the honor to inform you, that I last evening returned from an experimental trip made up to the barrier above Buddrachellum in the Iron Steamer, and am now therefore able to give you the results.

2nd. I will first state according to your suggestions the dimensions and cost of the boat. Her present length from stem to stern is 114 feet, beam 14'-6" depth. 3 feet, and draught of water without fuel about 13 inches on an even keel. Her displacement is about 2½ tons for every inch. So that she will take fuel for a whole days consumption, and after being decked draw about 18 inches. Her original cost was estimated at 25,000 Rupees, it has not exceeded that sum. The alterations were estimated at 4,000, but on account of an improvement on her lines suggested by Colonel Cotton which added 9 feet to her length, the cost will be about 5,000 Rupees. The fitting her with deck and the necessary cabins will probably cost 1,000 Rupees more, and this I would beg to be allowed to finish at once.

3rd. Being anxious to perform this voyage during the present month, and as from all appearances the usual high fresh in the river seemed to be about to fail, I would not wait for the cabins to be fitted, but had a temporary covering made with Tarpaulins; and all being ready on the 15th, I started accompanied by Mr. Vanstavern the gentleman I reported as having engaged on Mr. Towle's resignation.

4th. On reaching Thalapoodee about 16 miles from Dowlaishweram, the Steamer picked up 3 Dhonies, which I thought would be a good experiment to test the Steamer with, and with these in tow we made a distance of 30 miles the first day in 9 hours, being at the rate of 3½ inches an hour over the current. That night the weather became very bad and for 3 days and nights rained with scarcely any intermission. The only fuel we could get was very wet and green, and consequently our progress was very slow, and after towing the Dhonies through the gorge as far as Koydthi 50 miles the Steamer proceeded up alone, as the weather indicated a rise in the river so that I hoped to be able to cross the Barriers.

5th. On the 19th however the joint of the Main Steam pipe unfortunately began to leak, which rendered it impossible to keep up the full supply of steam at the requisite pressure. Being situated within the boiler it was not possible to rectify it with the means at our disposal, and as I hoped to be able still to keep sufficient steam at a compartively moderate pressure, I resolved to push on in the hope the leak would not get worse, and that there would be power enough to overcome all obstacles.

6th. In this way, and being delayed by the wet weather and fuel, Buddrachellum was reached on Monday the 21st at midday, but owing to the delay in obtaining supplies, the Steamer could not proceed till the following morning. On the 18th the Sauery came down and on the night of the 19th the Godavery itself rose 6 feet. The fresh attained its maximum* at Buddrachellum on the morning of the 22nd and before we had proceeded 8 miles we found the water beginning to subside. On reaching Doomgoodiem it had fallen 18 inches, so after taking in wood there, we pushed on up the Channel in which the Locks have been built, but which of course are now submerged, and reached the head of the Barrier at sunset where we anchored for the night having made 20 miles in about 9 hours actual steaming. The current the whole way was very strong, but it would not have retarded our progress had not the leak in the steam pipe become worse, so that it was only by stopping to accumulate the steam that we could pass the great rush at the rocks near Dhantanum, where the current runs at about 8 miles an hour. During the night of the 22nd the river fell 4 feet and the current at the head of the Barrier was so strong, that the Steamer

* Corresponding to 24 feet at Dowlaishwarum.

could only just stern it, and with the small supply of steam available, I saw it would not do to push on any further, in case the water should fall so low, as to render the Barrier impassable before our return. I therefore resolved on returning and reached Dowlaishweram. Again on the evening of the 24th having proceeded to a place 160 miles above the sea. Had the packing of the steam pipe not given way, I am convinced we should have been over the Enchampilly Barrier, for we should have averaged at least 5 miles an hour over the current if not more.

7th. The boat I can safely say is now a most efficient one, quite equal to any thing that is required of her on this river. When in proper order her speed was 9 miles per hour, and I have every hope of being able to get another mile by altering her trim. She steers quite easily and Captain Vanstavern says he considers her an excellent boat, and would take her any where. Her engines when working at 32 revolution per minute, with a pressure of 70 lbs. on the valve amount to 42 H. P. and the speed of the boat is about 9 miles.

8th. I would beg to suggest her being turned to account, by letting her work up and down the river as far as Buddrachellum either as a passenger boat or towing other boats, and the way by which an immediate trade might be created would be the establishment of a Depôt at Buddrachellum, of salt brought from the pans of both Masulipatam and Rajahmundry Districts. The Brinjaries will be just beginning to start for the Coast, and an announcement at Nagpore, Hydrabad, Chandah, &c. that salt would be procurable at Budrachellum at a slightly enhanced price, would be the signal for lacks of bullocks flocking there during the ensuing cold season.

9th. The merchants on the Coast would create the down traffic and in this way the river could be made use of certainly until the month of May next. As I feel pretty confident the various shoals could easily be deepened at a small expense, which would be covered by the rate the merchants would readily pay for freight. The slight experiment I made last hot season on the shoals above Rajahmundry were sufficiently successful to show what could be done every year when taken systematically in hand.

10th. The plan I would suggest would be the construction of 3 iron flats on the same model as that of the Steamer itself, they would carry 200 tons each with draught of water of 2′ 6″ and I reckon the cost of working as follows:—

	Rs.
Captain of Steamer.....	200
Crew, Engineer, Syrang Stokers, Lascars &c.	106
Fuel at 12 Rs. per day for 20 days in the month.	240
4 Lascars to each flat at 7.....	84
	630
Interest wear and tear and depreciation on Steamer at 10 per cent. on 30,000.....	250
Do. do. on flats at 5,000 each 5.....	60
Oil, greace and other sundries.....	60
Total monthly charge...	1,000

11th. The Steamer could easily make 4 trips per month, so she would thus carry 400 tons a distance of 110 miles for 250 Rupees or at the rate of 10 annas per ton for the whole distance being a little more than 1 pie per ton per mile. The merchants would readily pay 4 times that amount so that there is a large margin for any sanguine calculations on my part, until the iron flats could be constructed, the present boats belonging to Government here, could be used until the restriction on the Public Works is removed. The flats could be put together in 6 weeks after the material was received. To get however the greatest use out of the river, would be the establishment of exactly a similar Steamer and train in each reach between the Barriers, the distance being about 100 miles, and if temporary Locks were constructed wide enough to admit of the passage of the flats immediate use could be made of the river for nearly 300 miles. The flats I reckon would carry each 200 Europeans and a train would then take a whole native Regiment. I think a similar Steamer might be constructed here for a less cost. The boiler and

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shaft would have to be procured from Calcutta as the means are not at hand in the workshop to manufacture them, all the rest could be turned out almost as well as in England. I beg to apologize for this digression on a subject which has already been so much more ably treated but it is impossible for any one to proceed up this magnificient river without some feeling of enthusiasm at the Treasure the country possesses, and at the same time endeavouring to point out how it may most easily and quickly be turned to account.

Resolved to forward the foregoing interesting Report for the early information of Government, with the respectful expression of opinion by the Chief Engineer that it would appear in the highest degree advisable, alike on the score of economy, as of expedition, that the large quantities of ammunition, ordnance stores, and Military supplies in general which must be forwarded to Nagpore for the European Troops about to operate in that quarter, should so far as practicable, be forwarded by river transit, rather than by land carriage from Masulipatam.

2. The Chief Engineer would further venture to respectfully suggest that perhaps the opinions of such Officers as the Commandant of Engineers, the Principal Commissary of Ordnance, and the Inspector General of Ordnance and Arsenals, might be obtained with advantage, as to the manner and extent in which the navigation of the Upper Godavery could be made use of for the benefit of the public service at the present conjuncture.

3. Resolved also, that the Government be requested to authorize the slight further expenditure which the Steamer is reported to require in order to complete her cabin fittings, &c. &c. and that Captain Rundall be empowered to take such immediate measures as he may consider to be necessary to render the vessel fully serviceable.

(A true Extract.)

(Signed) C. E. FABER, Colonel,
Chief Engineer.

No. 43. ORDER THEREON, No. 1911; dated 10th October 1857.

Ordered to be communicated to the Military Department.

(Signed) H. FORBES,
Acting Secretary to Government.

Communicated to the Commandant Engineers, Principal Commissary of Ordnance, Inspector General of Ordnance & Arsenals, & Military Fort St. George, Consultation, 13th Oct/57, No 35-80.

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No 4201.

Extract from the Proceedings of the Chief Engineer in the Department of Public Works.

Under date the 5th October 1857

Read the following Letter from the District Engineer Godavery District.

(Here Order 26 September 1857 No 573.)

Received 10th October

Resolved, to forward the foregoing interesting Report for the early information of Government, with the respectful expression of opinion by the Chief Engineer that it would appear on the highest degree advisable, alike on the score of economy, as of expedition, that the large quantities of Ammunition, Ordnance Stores, and Military Supplies in general which must be forwarded to Rangpore for the European Troops about to operate in that quarter, should so far as practicable be forwarded by river transit, rather than by land carriage from Masulipatam &c.

2. The Chief Engineer would further venture to respectfully suggest that perhaps the opinions of such Officers as the Commandant of Engineers, the Principal Commissary of Ordnance, and the Inspector

Inspector General of Ordnance and Arsenals, might be obtained with advantage as to the manner and extent in which the navigation of the Upper Godavery could be made use of for the benefit of the public Service at the present conjuncture.

3.- Resolved also that the Government be requested to authorize the slight further expenditure which the Steamer is reported to require in order to complete her Cabin fittings &c &c. and that Captain Rundall be empowered to take such immediate measures as he may consider to be necessary to render the Vessel fully serviceable.

[Extract]

Lieut. Colonel
Chief Engineer

To

The Secretary to Government
P.W. Department

Com 15th Sept 57 No 16

P.W. 1 to Cos: 13th & 14th Oct
No 1951

Extract from the Proceedings of the Chief Engineer to the Secy to Government P.W. Department

Dated 8th October 1857
Rec'd 6th "

Ex Chief Engr 9th Octr 57
6 No 2621 in 6 Cys 4201
Enc. 1 Returned 2/11/57

Submits an Original Report from the District Engineer Coss Division of the Line made by the Iron Steamer above the Bra. Challenge - and Suggests that Ammunition, Ordnance Stores and Military supplies required be forwarded to Nagpore by river transit rather than by Land Carriage; and that the Sanction of expenditure which is required for the fitting up of the Steamer be authorized. - With an order

No 1911.
Ordered to be communicated to the Military Department
J Ford St George
10th October 1857
Copies to the Engr. Disp. 12th

No 2443.