M.R.O. 1—22406—21-11-57

MADRAS RECORD OFFICE.

Government of Madras.

Public (Works) DEPARTMENT.

G.O. No.	Press Mis.
Dated	18

Not to be folded or roughly handled

No. 24. Read the following letter from Lieutenant-Colonel E. LAWFORD, Officiating Chief Engineer; to the Secretary to Government, dated 9th November 1858, No. 5250.

SIR,

In forwarding copies of letters from the District Engineer and Collector of Canara, submitting a list of tools and other Articles required for improving the efficiency of the small work-shop lately formed at Tuddry in connexion with the Engineer's Department of that District, I have the honor to state that I quite concur with the opinion these Officers have expressed of the utility of the establishment, even in its present imperfect state, and of the desirability of its being placed on a better footing by the acquisition of the few additional tools and apparatus now applied.

1 Letter from District Engineer of Canara, No. 140 of 19th October 1858.
1 Do. from Collector of Canara, No. 29 of 23rd October 1858.
1 List of tools &c.

2. The tools already provided out of the local funds, as enumerated in the second para of Lieutenant Hunter's letter, are manifestly inadequate, and the addition of those named seems indispensable to enable him, with Mr. Lowry's able assistance, to carry on the work, so well begun, of improving Mechanical construction in the District and of rearing a class of skilled artizans.

3. It will be observed that the cost of a Lathe forms the main item of the list, and knowing how necessary a machine of that description is for all Mechanical operations, I beg most strongly to recommend that Lieutenant Hunter may be authorized to provide himself with one, and with the other Articles he requires, at a cost not exeeding Rupees (3,737) three thousand seven hundred and thirty-seven.

Letter from W. FISHER, Esq., Collector of Canara; to the Chief Engineer, dated 23rd October 1858, No. 29.

SIR,

I cannot forward Lieutenant Hunter's letter of the 19th (No. 140) to your address without expressing my hearty concurrence in his views regarding the importance of the Tuddry work-shop. In no District in the Presidency is an Establishment of this kind so much required, although it has been opened under every disadvantage, the able management of Mr. Lowry has already effected much, whilst the institution promises in his hands, to be of permanent benefit to the District, if a sufficient sum can be provided for the purchase of the tools required. I trust therefore that in placing the matter before Government your cordial support may be given to an undertaking, the cost of which will certainly bear no proportion to the benefit it is calculated to confer on the District.

Letter from Lieutenant J. N. HUNTER, Acting District Engineer, Canara; to the Chief Engineer, dated Camp Sedashegur 19th October 1858, No. 140.

SIR,

With reference to Para. 4 of the Superintending Engineer's letter No. 2945, dated 19th August 1858, stating that you were ready to submit for the favorable consideration of Government, an Estimate for the purpose of properly fitting the Tuddry work-shop with tools. I have the honor to forward such an estimate amounting to Rupees 3,737, of this you will perceive that the most expensive item is a turning lathe put down at Rupees 2,000.

2. The work-shop, as it stands, has been entirely constructed from Local funds, and is fitted up with four complete forges, Europe bellows, and anvils and a small supply of tools, purchased from Messrs. Brice and Co. Mr. Lowry has been very successful in instructing his workmen, and business is done there with system, method and consequent promptitude, for which we might vainly look from Native artisans without efficient European Superintendence.

3. Even now some very good jobs have been turned out. I would enumerate a paddle-boat built for Lieutenant Taylor of the I. N. We have also in hand a floating bridge to be placed over the Monkey-ferry at the foot of the Devimany Ghaut, all timber work too for Government purposes; bungalow-roofs, toll-gates &c., &c. are here executed.

4. The want of a lathe is severely felt, as without it we cannot turn a cart axle, bore out a box for a wheel, make a pump or any machine, the want of which is so severely felt in this country generally, and this District particularly.

Work Shop

5. Regarding the benefits likely to accrue from the introduction of a properly conducted work-shop, I would state in the first place the certainty of accomplishing Government work and doing it quickly and well. Secondly, I would bring forward the fact that the introduction of such measures is likely to have a permanently wholesome effect in the District, by gradually educating and distributing skilled Mechanics, of whom there are at present none. 3rdly that it is a practical and useful school likely to have a salutary influence on all classes of Natives, who come within range of its teaching, that it will be eminently servicable to the Public Works Department by imparting to a few Eurasians or Natives enough of Mechanics, Geometry, and accounts to fit them for the posts of Sub-Overseers, the greater part of the present incumbents being entirely ignorant of all these things.

6. That it is certain to introduce a better and more scientific style of working, as an instance I would mention a pump that Mr. Lowry now has in hand for the purposes of irrigation and baling. It has been difficult of construction as the wheel and other parts which should have been turned have been cut out by hand.

7. It is quite refreshing to see the style in which the work is done at Tuddry, Smiths stand up to their work, piles are properly driven for the pier with a Monkey and ram and the whole arrangement and the way in which each man goes straight to work show, that things are carried on with system and method.

8. In conclusion I would beg for immediate sanction for the amount required, as at present we can get the tools from Bombay by Sea in a few days, whereas, if they be kept for next Budget, another monsoon will have set in, another year will have passed and much valuable time for workshop operations will have elapsed before they can be got.

Memo of Materials and tools required to properly fit out Tuddry Work-shop.

	Weight.			Amount.		
	Cwt.	M	lb.	Rs.	A.	P.
Best English square bar... ... ... $1\frac{3}{4} \times 1\frac{3}{4}$	20	...	...	140	...	...
Best do. do. ... ... $1\frac{5}{8} \times 1\frac{5}{8}$	10	...	...	80	...	...
Best do. nail rod. ... ... $\frac{5}{8} \times \frac{5}{8}$	5	...	...	40	...	...
Best do. round do. ... ... $\frac{5}{8}$ diameter. ...	10	...	...	80	...	...
Best do. flat bar. ... ... $2\frac{1}{2} \times \frac{1}{2}$	10	...	...	80	...	...
Best do. do. ... ... $1\frac{5}{8} \times \frac{1}{4}$	5	...	...	35	...	...
Best do. round... ... ... 1 in diameter... ...	5	...	...	45	...	...
Best do. do. wire. ... ... $\frac{1}{6}$ to $\frac{1}{4}$ inches. ...	5	...	...	50	...	...
Angle Iron.... ... ... $\frac{1}{2}$	5	...	...	40	...	...
50 Wheel barrow trendles, cast Iron, about... ... ... $\frac{1}{4}$	4	...	...	40	...	...
1 Good slide rest lathe. ... ...1,500 to..	6	2	...	70	...	...
3 Full sized Vices...				2,000	...	...
4 Anvils, steel faced...				100	...	...
two of them each 2 Cwts....						
two of thom each $2\frac{1}{2}$ do.	4	...	...			
4 Good Smiths Bellows.	5	...	...	250	...	...
Flat bar shear steel.				160	...	...
Chisel bar cast do... ... ... $2\frac{1}{2} \times \frac{1}{2}$	1	...	...	40	...	...
Old Copper...	1	...	...	40	...	...
Zinc...	2	...	...	128	...	...
Block, tin.	.....	...	10	5	...	...
6 Good Hand-Saws...	.....	1	...	10	...	...
24 Gross of Screws of sizes from $\frac{1}{2}$" to 2 in length...	.....	...	...	30	...	...
6 Dozen of Files, assorted...	.....	...	...	72	...	...
2 Hand Vices.	.....	..	...	54	...	...
2 Pairs of Plyers.	.....	...	...	2	...	...
3 Dozens of 4 Wrought-Iron Hinges...	.....	...	...	2	...	...
3 do. of 3 do. do.	.....	...	...	24	...	...
1 Weighing Machine...	.....	...	...	20	...	...
	.....	...	...	100	...	...
Total Rupees.....				3,737	...	...

Camp Tuddd ry, 11th September 1858.

(Sigined) R. J. LOWRY,
Offg. Asst. Exc. Engr. Canara.

No. 25. ORDER THEREON, No. 2589; dated 2nd December 1858.

Para. 1. In this letter the Officiating Chief Engineer requests that sanction may be given for an expenditure of Rupees 3,737 required for procuring a few additional tools for the Workshop at Tuddry.

2. Before complying with this requisition the Government request that Colonel Lawford will report under what authority the Workshop in question has been established; and what arrangements have been made for superintending and working it; as well as the cost of such arrangements.

3. The District Engineer states that "the Workshop," "as it stands, has been entirely "constructed from Local Funds." Colonel Lawford will state the amount expended for this purpose, and whether he considers the expenditure a proper application of the local funds under the rules laid down in Extract Minutes Consultation 10th April 1856, No. 371.

Page 289, of Mr. Grant's Code.

(Signed) W. H. BAYLEY,
Acting Secretary to Government.

Pub Works Dept.

5
91

No. 2589.

Extract from the Minutes of Council held

Under date the 2d Decemr 58

Read the following letter from

the Offg Chief Engineer

(Here enter 9th November 1858
No. 5250)

1. In this letter the offg
exciting Chief Engineer requests
that sanction may be given
for an expenditure of Rupees
3737 required for procuring
a few additional tools for
the work shop at Sudder
2. Before complying
with this requisition the
Government request that
Colonel Sanford will report
under what authority the
work shop

workshop in question has
been established, and to
what arrangements have
been made for superin-
tending and working it,
as well as the cost of such
arrangements.

3. The District Engi-
neer states that "the workshop,
"as it stands, has been en-"
"tirely Constructed from "
"Local Funds." Colonel
Sanford will ~~state~~ report the
amount expended for
this purpose, and whether
he considers the ~~the~~ departure
~~in his opinion it was~~ a proper
application of the local
funds under the Rules laid
down in Circ 10 April Page 289 of Mil Roads Code
1856 No 371.

W. H. B

10 Copies to the Off Chief Engr 2 Dists 3 Ds

District Engr Office
Canaral
Camp Sedasheguer 19th October 1858.

From Lieutenant J. N. Hunter,
A.D.E. Canaral.

To, The Chief Engineer D. P. Works
Fort St. George

Sir

With reference to Para 4 of the Superintending Engineer's letter No. 2945. dated 19th August 1858. stating that you were ready to submit for the favorable consideration of Government, an Estimate for the purpose of properly fitting the Saddry Work-shop with tools, I have the honor to forward such an estimate amounting to Rupees 3737, of this you will perceive that the most expensive item is a turning lathe put down at Rupees 2000.-

2. The workshop, as it stands, has been entirely constructed from Local Funds, and is fitted up with four complete forges, Europe bellows and anvils and a small supply of tools purchased from Messrs Bruce and Co. Mr. Lowry has been very successful in instructing his workmen, and business is done there with System, method and consequent promptitude for which we might vainly look from Native artisans without efficient European Superintendence.-

3. Even now some very good jobs have been turned out.- I would enumerate a paddle boat built for Lieutenant Taylor of the I.N.- we have also in hand

Letter from Circular

Recd. 25th October 1858.
Copied Vol. 24 Page 20.

Copied
Dy. Dy. Secy.

From the Chief Engineer Fort St. George
No. 1028 Dated 22nd October 1858.

Recd. 25th October 1858.

Referring Letter of date
Requesting Estimate for
Fitting up Saddry Work
Shop with Tools.

Referred to Superintending Engineer
Canaral.

Recd. 25th October 1858.

Vol. 24 Page 20.

hand a floating bridge to be placed over the Monkey ferry at the foot of the Devimany Chaut, all timber work too for Government purposes - bunglow roofs, toll gates Vcu. Vcu. are here executed. —

4. The want of a lathe is severely felt, as without it we cannot turn a Cart axle, bore out a box for a wheel, make a pump or any machine, the want of which is so severely felt in this country generally, and this district particularly —

5. Regarding the benefits likely to accrue from the introduction of a properly conducted work-shop. I would state in the first place the certainty of accomplishing Government work and doing it quickly and well - Secondly. I would bring forward the fact that the introduction of such measures is likely to have a permanently wholesome effect in the District, by gradually educating and distributing skilled mechanics, of whom there are, at present none - 3rdly that it is a practical and useful school likely to have a salutary influence on all classes of natives, who come within ranges of its teaching, that it will be eminently serviceable to the P.W.D. by imparting to a few Eurasians or natives enough of Mechanics, Geometry, and accounts to fit them for the posts of Sub Overseers, the greater part of the present incumbents being entirely ignorant of all these things. —

6. That it is certain to introduce a better and more

more scientific style of working, as an instance I would mention a pumps that Mr. Lowry now has in hand for the purposes of irrigation and baling - It has been difficult of construction as the wheels and other parts which should have been turned have been cut out by hand. —

7. It is quite refreshing to see the style, in which the work is done at Tuddiy, Smiths stand up to their work, piles are properly driven for the pier with a Monkey and rams and the whole arrangement and the way in which each man goes Straight to work, shows that things are carried on with Systems and method. —

8. In conclusion I would beg for immediate sanction for the amount required, as at present we can get the tools from Bombay by Sea in a few days, whereas, if they be kept for next Budget, another monsoon will have set in, another year will have passed and much valuable time for workshop operations will have elapsed before they can be got. —

I have Vcu.

(Signed) W. Hunter Lieutenant
A.E. Distt. Engr. Canara

Forwarded through the Collector of Canara.

Collector's Cutcherry, Tanjore
28th October 1858.

No 29

From W. Fisher Esqre
Collector of Canara

To The Chief Engineer S. C. W.
Madras

Sir,

I cannot forward Lieut. Hunter's letter of the 19th (No 140) to your address without expressing my hearty concurrence in his views regarding the enlargement of the Suddry workshops. In no District in the Presidency is an Establishment of this kind so much required. Although it has been opened under every disadvantage, the able management of Mr Lowry has already effected much, whilst the institution promises in his hands, to be of permanent benefit to the District, if a sufficient sum can be provided for the purchase of tools required. I would therefore that in placing the matter before Government your Cordial support may be given to an undertaking, the cost of which will certainly bear no proportion to the benefit it is calculated to confer on the District.

I have &c
(Signed) Wm. Fisher
Collector

[True Copies]

Charles A. Orr Captain
Actg Supt Engr Nilgiri Circle

Memo: of Materials and tools required to properly fit out Suddry Workshops.

		Weight Cwt.	qr.	lb.	Amount Rs.	As.	P.
Best English Square bar	1¾ × 1¾	20	"	"	140	"	"
Best do do	1⅝ × 1⅝	10	"	"	80	"	"
Best do nail rod	⅜ × ⅜	5	"	"	40	"	"
Best do round do	¾ diam.	10	"	"	80	"	"
Best do flat bar	2½ × ½	10	"	"	80	"	"
Best do do	1⅝ × ¼	5	"	"	35	"	"
Best do round	1 in diam.	5	"	"	45	"	"
Best do do wire	1/16 to ¼ inches	5	"	"	50	"	"
Best do Square bar	½"	5	"	"	40	"	"
Angle Iron	¼"	4	"	"	40	"	"
50 Wheel barrow Strendles Cast Iron about		6	2	"	70	"	"
1 Good slide rest lathe	1500 to				2,000	"	"
3 Full sized vices					100	"	"
4 Anvils steel faced							
two of them each 2 Cwts		4	"	"	250	"	"
two of them each 2½ do		5	"	"			
4 Good Smiths Bellows					160	"	"
Flat bar Shear steel	2½ × ½"	1	"	"	40	"	"
Chisel bar Cast ditto		1	"	"	40	"	"
Old Copper		2	"	"	128	"	"
Zinc		"	"	10	5	"	"
Block tin		"	1	"	10	"	"
6 Good Hand Saws		"	"	"	30	"	"
24 Gross of Screws of Sizes from ½ to 2 in. length		"	"	"	72	"	"
6 Dozen of files assorted		"	"	"	54	"	"
2 Hand vices		"	"	"	2	"	"
2 Pair of Plyers		"	"	"	2	"	"
3 Dozens of 4" wrought Iron hinges		"	"	"	24	"	"
3 do of 3" do do		"	"	"	20	"	"
1 Weighing Machine		"	"	"	100	"	"
Total Rupees					3737	"	"

Camp Suddry
11th September 1858.

(Signed) R. J. Lowry
Offg Asst Ex. Engr Canara

(Signed) J. N. Hunter Lieut.
Asst Dist. Engr Canara

No 5250

Central Office of P.W.D.
Fort St George, 9th November, 1858.

From The Offg. Chief Engineer.

To The Secretary to Government
Public Works Department.

Public

Sir,

Rec'd Copies of Letters Viz.
1 Letter from Dist Engr of Canara No 1140 dt 19 Oct/58.
1 do from Collector of Canara No 29 dt 23 Oct/58.
1 List of Tools

In forwarding Copies of letters from the District Engineer and Collector of Canara, submitting a list of Tools and other Articles required for improving the efficiency of the Small Workshop lately formed at Judhy in connexion with the Engineer's Department of that District, I have the honor to state that I quite concur with the opinion these Officers have expressed of the utility of the establishment, even in its present imperfect state, and of the desirability of its being placed on a better footing by the acquisition of the few additional tools and appliances now applied for.

2. The tools already provided out of the local funds, as enumerated in the second para of Lieut Hunter's letter, are manifestly inadequate, and the addition of those named seem indispensable

indispensable to enable him, with Mr Lowry's able assistance, to carry on the Work, so well begun, of improving Mechanic construction in the District and of rearing a class of skilled artizans.

3. It will be observed that the cost of a Lathe forms the main item of the list, and knowing how necessary a Machine of that description is for all Mechanical operations, I beg most strongly to recommend that Lieutenant Hunter may be authorized to provide himself with one, and with the other Articles he requires, at a cost not exceeding Rupees (3,737) three thousand seven hundred and thirty seven.—

I have the honor to be,
Sir,
Your most Obd Servant.

Fort St George
9th November 1838

C Lawford Lieut & C.E.
Offg. Chief Engineer.

To
The Secretary to Government
Public Works Department.—

Ist

P.W. 1858 Department
Dy Secretary's Dept.
No. 2674

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

Dated 9th November 1858
Recd 11th do
No. 5250
Encl 1

Forwards letters from Collector and District Engineer of Canara requesting that sanction may be given for procuring a few additional tools for the Workshop at Tuddery at a cost of Rupees 3437 and recommends the same.

Est. 2589. 22 Dec 58.

No. 24.

C25 Nov. R30th