(1) பக்கங்களின் எண்ணிக்கை 46.

(2) புதுக்கித் திருப்பிய நாள் 10.90

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

PWD துறை

(112)

அரசாணை எண்.
மு. கோப்புத் தாள் எண். 3067

அச்சகம்
பலவகை

நாள் : 16 - 11 - 1891 198

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

158 + 22 Sheets 23 Sheets
Plans 11 and 12 Statements

ஆவண. கா-1—18,006—15-6-87.

3067/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers:—

Office-note from the Examiner of Public Works Accounts, dated Madras, 23rd October 1891, No. 6451.

With reference to G.O., No. 3174 W., dated 2nd December 1886, I forward herewith a report on the working of the Presidency Workshops during the official year 1890–91.

ENCLOSURE.

REPORT on the working of the Presidency Workshops for the official year 1890–91, prepared in accordance with G.O., No. 3174 W., dated 2nd December 1886.

The following is the account of direct receipts and charges of the shops during the year.

A.—Account of direct Receipts and Charges of the Workshops during the year 1890–91.

Item No.	Particulars of receipts.	Amount.
	Receipts.	Rs. A. P.
1	Cash balance	47 3 2
2	Cheques of Public Works Officers	1,17,235 9 6
	III—Items adjustable by Civil Department.	
3	Miscellaneous	23 1 0
	IV—Items adjustable by Public Works Department—Inter-departmental charges to Public Works Department.	
4	Forest Department	118 12 10
5	Other departments	77 14 0
6	Central adjusting account	477 5 3
7	Telegraph Department	25 12 9
8	Transfers Public Works Department	30,260 8 8
9	Guaranteed Railways	250 0 0
10	Provincial revenue receipts	6,741 0 0
11	Income-tax	390 13 3
12	Deposits	4,505 3 5
	Total ..	1,60,153 3 10

Item No.	Particulars of charges.			Amount.
	Charges.			Rs. A. P.
1	Payments into treasuries			8,351 9 1
	III—Items adjustable by Civil Department—Inter-departmental charges by Public Works Department.			
2	Forest Department			426 1 8
3	Other departments			41,719 4 4
4	Central adjusting account			6,754 1 11
5	Transfers of the Public Works Department			74,008 13 10
	Expenditure against Provincial—Budget grant.			
6	Original works		Rs. A. P. 1,109 3 8	
7	Repairs	Rs. A. P. 1,502 4 7		
8	Cost of practical training of the students of the College of Engineering	— 436 12 3	1,065 8 4	
9	Net debit to repairs— Establishment	18,276 4 8		
	Deduct credits on account of 10 per cent. on the value of work done for other departments and private parties	Rs. A. P. 4,525 0 0		
	Pay of Vythialinga Acharry brought on to regular establishment charged to jobs by credit to establishment	360 0 0		
		—4,885 0 0	13,391 4 8	
	Tools and plant.			
10	New supplies	1,864 3 9		
	Deduct value of articles transferred to other departments, &c.	133 8 11		
		1,730 10 10		
11	Repairs and carriage	789 13 2		
12	One per cent. deduction	— 452 0 0	2,068 8 0	
	Add net debits to suspense.			
13	Miscellaneous advances	.. .. ..	— 606 8 10	
14	Workshop manufacture suspense	13,637 4 5		
15	Deduct arrears unpaid	6,786 10 5	6,850 10 0	23,878 9 10
16	Deposits	.. ..	.. ..	4,921 9 1
17	Cash balance	.. ..	.. ..	93 2 1
			Total ..	1,60,153 3 10

B.—Revenue or Profit and Loss account during the year 1890–91.

Item No.	Particulars of receipts.	Amount.
	RECEIPTS.	Rs. A. P.
	To Provincial Revenue Receipts.	
(a) 1	14 per cent. on Rs. 48,743, value of work done for other departments and the public .. .. Rs. A. P. 6,824 0 0	
2	Sales of old materials .. 122 8 0	
3	Miscellaneous (less refunds Rs. 120–14–0) .. .. — 15 9 9	
		6,930 14 3
	To Establishment.	
(b) 4	10 per cent. on Rs. 50,035, value of work done for other departments and the public	5,003 0 0
	To Tools and Plant.	
(c) 5	1 per cent. on Rs. 48,743, value of work done for other departments and the public	487 0 0
6	To pay of engraver Vythialinga Acharry of the regular establishment charged to jobs by credit to establishment ..	360 0 0
7	Profit on foundry	1,185 10 6
8	To loss	21,008 14 0
	Total ..	34,975 6 9

Item No.	Particulars of charges.			Amount.
	DIRECT CHARGES.			Rs. A. P.
	Working expenses.			
1	By repairs	Rs. A. P. 1,502 4 7		
2	Deduct cost of practical training of the College of Engineering	436 12 3	1,065 8 4	
3	By establishment		18,276 4 8	
4	By tools and plant repairs		789 13 2	
				20,131 10 2
	Indirect Charges.			
	By depreciation—			
5	Block at 3 per cent. on		2,362 15 9	
6	Machinery and plant at 4 per cent. on		4,248 9 0	
				6,611 8 9
7	By leave and pension allowances at 14 per cent. of Rs. 18,276-4-8 ..		..	2,558 10 11
8	Loss on general charges		..	1,888 8 11
9	By interest on Capital at 4 per cent. of Rs. 1,93,185-7-3		7,727 0 0	
	Deduct interest over-charged since 1880–81 as detailed in statement B-1 (see paragraph)		3,942 0 0	
				3,785 0 0
			Total ..	34,975 6 9

		Rs.
(a)	Total value of work done for other departments and the public	48,603
	Add value of work done for Military Works Department in March 1890 on which percentage was not charged until 1890–91 ..	1,432
		50,035
	Deduct value of work done for Military Works Department in February and March 1891 on which only 10 per cent. for establishment was ordered to be charged	1,292
		48,743
(b)	Rs. 48,603 + 1,432 as above	50,035
(c)	Same as (a)	48,743

2. The following items under charges in this statement call for remarks :—

(a) *Item* 8—*Cost of practical training of students of the Civil Engineering College.*—This credit item of Rs. 436–12–3 is a write-back under G.O., No. 1740 W., dated 21st June 1890, of the charges incurred in 1889–90 for labour and materials used by the Civil Engineer students undergoing practical training in the workshops.

(b) *Item* 9—*Establishment.*—The expenditure under this item is less than that of the previous year by Rs. 6,072–1–3. This is due (1) to the difference in salaries of Colonel Clarke, who proceeded on leave, and of Mr. Wickham, who was appointed to officiate for him as General Superintendent from September 1890, (2) to the employment in Periyár No. I Division of Mr. Francis, Honorary Assistant Engineer, for a few months, (3) to the transfer to the Presidency division of a supernumerary draftsman, (4) to the substitution of a clerk in the 4th class, 2nd grade, for a clerk of the 3rd class, 2nd grade, and (5) to increased outturn of work for other departments.

3. The revenue or profit and loss account of the shops is shown in the following statement :—

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2

B-1.—Statement showing the difference in the calculations of interest charges as made in previous accounts and as revised in accordance with the principles adopted in the Irrigation and Railway branches.

Years.	Capital. Opening balance.	Capital. Closing balance.	Increase or decrease of capital.	Amount on which interest should have been calculated.	Interest charges. As how calculated.	Interest charges. As previously calculated.	Difference of interest. Over charged.	Difference of interest. Under charged.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1880–81.	4,17,620	35,922	— 61.698	4,17,620 at 5 per cent. .. Less 61,699 at 2½ per cent.	20.881 — 1.542	20,897	1,558	..
					19,339			
1881–82.	3,55,922	2,39,946	— 1,15.976	3,55,922 at 4 per cent. .. Less 1,15,976 at 2 per cent.	14.237 — 2.320	13,386	1,469	..
					11,917			
1882–83.	2,39,946	1,79,969	— 59.977	2,39,946 at 4 per cent. .. Less 59,977 at 2 per cent.	9,598 — 1.200	9,639	1,241	..
					8,398			
1883–84.	1,79,969	2,00,776	20,806	1,79,969 at 4 per cent. .. Add 20,806 at 2 per cent.	7,199 416	7,223	..	392
					7,615			
1884–85.	2,00,549	2,20,430	19,881	2,00,549 at 4 per cent. .. Add 19,881 at 2 per cent.	8,022 398	8,080	..	340
					8,420			
1885–86.	2,20,430	2,30,684	10,254	2,20,430 at 4 per cent. .. Add 10,254 at 2 per cent.	8,817 205	8,881	..	141
					9,022			
1886–87.	2,30,684	2,10,388	— 20.296	2,30,684 at 4 per cent. .. Less 20,296 at 2 per cent.	9,227 — 406	9,227	406	..
					8,821			
1887–88.	2,10,388	2,07,063	— 3.325	2,10,388 at 4 per cent. .. Less 3,325 at 2 per cent.	8,416 — 66	8,416	66	..
					8,350			
1888–89.	2,07,063	1,98,226	— 8.837	2,07,063 at 4 per cent. .. Less 8,837 at 2 per cent.	8,283 — 177	8,283	177	..
					8,106			
1889–90.	1,98,226	1,90,251	— 7,975	1,98,226 at 4 per cent. .. Less 7,975 at 2 per cent.	7,929 — 159	7,610	..	160
					7,770			
1890–91.	1,90,251	1,93,185	2,934	1,90,251 at 4 per cent. .. Add 2,934 at 2 per cent.	7,610 59	7,727	58	..
					7,669		4,975	1,033
							3,942	

4. Item (8), loss Rs. 21,008–14–0, includes Rs. 2,558–10–11 on account of leave and pension allowances and Rs. 3,785 for interest on capital account. These two items, amounting to Rs. 6,343–10–11, are only "paper transactions" (see para. 13), so that excluding these charges, the direct loss on the operations of the year was Rs. 14,665. Against this loss should be considered what it would have cost the department to get its own work done outside, and assuming the saving to be 25 per cent. on cost of outturn, which is the rate charged by the workshops to other departments, this saving would amount to Rs 15,349 (viz., 25 per cent. on Rs. 61,398, the value of work done for the Public Works Department). The financial result of the operations of the year would therefore be a gain of Rs. 684.

5. Two items have for the first time been introduced in statement B, viz.:—

No. 7, under receipts, showing a profit on foundry of Rs. 1,185–10–6
which indicates that the rate on which this profit is calculated should be frequently revised so that the account shall balance itself at the close of each year; and

No. 8, under charges, showing a loss on general charges of Rs. 1,888–8–11.
This shows that the 10 per cent. at present charged as workshop centages does not cover the general charges of the shops. Instead of increasing the percentage, I think every effort should be made to reduce the general charges by more economical working.

6. The balance sheet on capital account as it stood on the 31st March 1891 is as follows:—

C.—Capital balance sheet as it stood on the 31st March 1891.

Item No.	Capital and liabilities.	Amount.	Item No.	Property and assets.	Amount.
		Rs. A. P.			Rs. A. P.
	Capital.			*Block.*	
1	Capital of the shops	1,93,185 7 3	1	Balance on 1st April 1890	78,766 6 6
			2	Depreciation at 3 per cent.	— 2,362 15 9
	Debits.				76,403 6 9
2	Deposits (refundable)	474 5 4	3	Additions during the year	1,109 3 8
3	Value of labour and materials on workshop jobs not paid for	6,786 10 5			77,512 10 5
				Machinery and plant.	
			4	Balances on 1st April 1890	1,00,347 10 11
			5	Deduct book value of articles transferred to other department	— 133 8 11
				and broken up	—4,248 9 0
			6	Depreciation at 4 per cent.	1,01,965 9 0
			7	Additions during the year	1,864 3 9
					1,03,829 12 9
				Suspense account.	
			8	Miscellaneous advances	85 15 11
			9	Workshop manufacture suspense	18,924 13 10
			10	Cash (cash balance)	19,010 13 9
					93 2 1
	Total ..	2,00,446 7 0		Total ..	2,00,446 7 0

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7. *Item 5—Machinery and Plant.*—Rs. 133-8-11 represent the value of six pulleys issued to the Medical Store Department, eleven large hangers brocken up for old iron and five benches used up by the Engineer students undergoing practical training.

8. It will be seen from statement C and the statement below that the additions to capital during the year were Rs. 1,109-3-8 under block and Rs. 1,864-3-9 under machinery and plant, and that the total capital of the shops at the end of the year stood at Rs. 1,93,185-7-3 or Rs. 2,934-11-6 more than the balance at the end of 1889-90 :—

	Opening balance (G.O. No. 3201 W., dated 3rd December 1890).			Closing balance.		
	RS.	A.	P.	RS.	A.	P.
Block	78,766	6	6	77,512	10	5
Machinery and plant	1,06,347	10	11	1,03,8.9	12	9
Workshop manufacture suspense ...	10,717	1	9	18,924	13	10
Miscellaneous advance	692	8	9	85	15	11
Cash balance	47	3	2	93	2	1
Total ...	1,96,570	15	1	2,00,446	7	0
Deduct arrears due to workshop, manufacture suspense	5,429	8	4	6,786	10	5
Deposits	890	11	0	474	5	4
Total ...	6,320	3	4	7,260	15	9
Capital	1,90,250	11	9	1,93,185	7	3
Increase to capital during 1890-91 ...	2,934	11	6	...		
Total ...	1,93,185	7	3	1,93,185	7	3

9. The outturn of work is valued at Rs. 1,22,970-11-5 against Rs. 1,24,316-8-0 in the previous year, showing a decrease of Rs. 1,345-12-7.

10. The following statement compares the value of outturn during the year under review with that of the preceding year : —

	1889-90.			1890-91.			Difference.			
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	
Work done for the Public Works Department	7,7257	12	2	61,398	2	6	8,531	14	1	Less than in 1889-90.
Military Works Department and State Railways				7,327	11	8	7,709	13	1	More do. do.
Work done for other departments ..	43,167	6	8	50,877	3	9	523	11	7	Less do. do.
Do. for private parties ..	3,891	5	2	3,367	9	7				
Total ..	1,24,316	8	0	1,22,970	11	5	1,345	12	7	Do. do. do.

11. With reference to the charge for interest on capital outlay (item 9, charges, in statement B), it is necessary to bring to notice that interest was charged in 1889-90 and 1890-91 for the full twelve months in each case on the capital as it stood at the *close* of each year, while in other years the calculation was made on the capital at the *commencement* of the year. Neither of these methods appears to be correct, as in the former case additions to capital during the year were charged with interest for the full year, and in the latter case interest was not allowed on reductions of capital during the year.

12. I have therefore revised the calculations of interest since 1880-81, the earliest year for which figures are readily obtainable, with the result that the loss on the shops during 1890-91 is reduced from Rs. 24,951 to Rs. 21,009, the over-charge of interest having amounted since 1880-81 to Rs. 3,942, and I have shown this difference as a deduction entry in the profit and loss account now submitted—*vide* item 9, charges, in the statement B and the detailed statement B-1. appended).

13. In para. 4 it was said that charges for interest on capital and for leave and pension allowances were only "paper transactions," that is to say, no charges of either kind are included in the price of outturn ; and it therefore appears desirable that such charges should be eliminated in considering the financial results of workshops such as these.

14. The Presidency Workshops are not maintained for commercial purposes, but their existence is due to departmental necessities, and, as far as I can judge, the simplest test of their financial success is the saving or loss to ourselves on the work done in them for the department.

15. In para. 16 I give a summary of the results of the past five years' transactions. I do not go further back, because in the five years prior to 1886-87, when the shops worked at a *profit* of Rs. 27,822 exclusive of charges for interest and leave and pension allowances, (i) the percentages then charged to other departments were abnormally high and (ii) the accounts did not show separately the value of work done (*a*) for the Public Works Department and (*b*) for other departments. Those accounts therefore afforded no means of comparison with present results.

16. Since 1886-87 however, that is, during the past five years—

	RS.
(i) The total loss including interest and leave and pension allowances has been	1,29,523
(ii) The loss excluding those indirect charges has been	79,206
(iii) The value of work done for the Public Works Department has been	4,05,502
(iv) 25 per cent. on this would be	1,01,376

Details of these figures will be found in enclosure D. (i) may be called the loss under commercial principles, and taking (iv) as the amount we have saved, that is on the assumption that we turn out work as cheaply and as of good quality as outside shops do by doing our own work instead of having to go outside for it, we have *lost* Rs. 28,147 (1,29,523—1,01,376) during the past five years ; but if we omit charges for interest and leave and pension allowances (ii), the shops have been worked at a *profit* of Rs. 22,170 (1,01,376—79,206).

17. Instead, therefore, of the present three statements of account (enclosures A., B. and C.) that are submitted for these workshops annually, I would propose one simple statement with a brief note bringing to notice—

(i) The additions and reductions to block and plant during the year as in para. 8 of this report.

(ii) The result of the year's working as shown in para. 16, omitting the first item.

(iii) any other points of importance connected with the accounts.

The following is the proposed form in which I show the results of last year's working by way of illustration :—

Item No.	Receipts.	Amount.	Item No.	Charges.	Amount.
		RS.			RS.
1	25 per cent. on value of work done for other departments and the public ..	12,314	1	Establishment	18,276
2	Sale of old materials	122		Repairs—	RS.
3	Miscellaneous receipts	— 16	2	To machinery .. .	1,066
4	Pay of an engraver charged to jobs by credit to establishment	360	3	To tools and plant ..	790
5	Profit on foundry	1,186			1,856
6	Loss on the year's working (*vide* para. 4)	14,665		Depreciation—	
			4	Of block at 3 per cent. on ..	2,363
			5	Of machinery and plant at 4 per cent. on	4,249
					6,612
			6	Loss on general charges	1,889
	Total ..	28,633		Total ..	28,633

Every item in this statement is based on facts, and the form is submitted for the favorable orders of Government.

(Signed) I. S. SHERLOCK-HUBBARD.
Offg. Examiner, Public Works Accounts.

MADRAS,
23rd October 1891.

Note by the Chief Engineer, Public Works Department.

The Examiner's report on the working of the Presidency Public Works Workshops for the official year 1890-91 shows that there has been a falling off of Rs. 1,345-12-7 in the total outturn of work and of Rs. 8,531-14-1 in the value of work done for the Public Works Department as compared with 1889-90.

2. The profit and loss account (statement B) shows the loss on the year's transactions to be Rs. 21,008-14-0 against Rs. 34,370-8-7 in 1889-90. The actual loss on the year's transactions as per statement B was Rs. 24,950-14-0, but the Examiner has reduced this to Rs. 21,008-14-0 by deducting Rs. 3,942, interest on capital over-charged since 1880-81.

3. The Examiner points out that the loss of Rs. 21,008–14–0 includes two items which are "paper transactions;" Rs. 2,558–10–11 for leave and pension allowances and Rs. 3,785 for interest on capital, and that if these two items, amounting to Rupees 6,343–10–11, be excluded, the direct loss will be Rs. 14,665. He also suggests that the saving in cost of work by the maintenance of a Government workshop as compared with the employment of outside agency may be taken at 25 per cent. on the value of work done for the Public Works Department, or Rs. 15,349 which would rather more than balance the loss of Rs. 14,665. Without accepting definitely the precise proportion of 25 per cent., it may be admitted that the convenience for administrative purposes of the maintenance of a departmental workshop over-balances the small nominal loss which its operations entail.

4. The Examiner in para. 17 of his note suggests a simplification of the forms in which the several accounts are submitted to Government, but the undersigned cannot concur in this suggestion, and considers that the details now given are essential for the proper understanding of the operations of the year.

5. In para. 6 of G.O., No. 3201 W, of 3rd December 1890, the Chief Engineer was directed to consider whether the value of the shops to the department justified their continued existence.

Having carefully considered this question, the undersigned is of opinion that it must be answered in the affirmative. It is morally certain that the work which they do could not be done with equal certainty and economy by private agency, and that the loss which their maintenance involves would be nearly if not quite equalled by the extra cost of work done by such agency, while in many cases it is doubtful whether the latter could execute the work at all.

6. The undersigned thinks it right to say that he approached this question with a somewhat strong pre-possession in favour of the abolition of the shops, but the evidence has compelled the conclusion that this abolition is undesirable. Every effort should be made to reduce establishment and general charges, to economise labour, and, above all, by good work and prompt execution of orders, to secure an increased proportion of work for the Public Works Department for the execution of which the shops are primarily maintained.

7. The execution of work for private parties should be discouraged as much as possible, and should, in fact, not be undertaken unless there is good ground for the belief that it cannot be done by private agency; it cannot be too strongly urged that the shops are maintained as a portion of the administrative machinery of the Public Works Department, and not with the object of competing with private firms.

(Signed) J. PENNYCUICK, Colonel, R.E.,
Chief Engineer, P.W.D.

10th November 1891.

Order—dated 16th November 1891, No. 3067 W., Public Works.

Recorded.

2. The Government concurs in the remarks of the Chief Engineer.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, V Circle.
" Examiner, Public Works Accounts.

Exd. S. J. Pereira.
Spare Copies

3067/5

GENERAL.
ACCOUNT.

Govt. of {1891} Madras.

PUBLIC WORKS.

Dated November, 16th.

Recd. *Encl.*

G.O., 16th Nov. 1891, No. 3067 W.

NOVEMBER.

Presidency Public Works Workshops

Note by the Chief Engineer, Public Works Department, on the report of the working of the — for the official year 1890–91, recorded with remarks.

D.

Presidency Public works workshops

Summary of results from 1886-87 to 1890-91.

Year	Total Loss	Leave and Pension Allowances	Interest	Total (3+4)	Net Loss (2-5)	Out-turn of work for the P. W. D. Amount	25% on (7)	Remarks
1	2 Rs	3 Rs	4 Rs	5 Rs	6 Rs	7 Rs	8 Rs	9
1886-87	9,587	2,325	9,227	11,552	-1965	97,995	24,499.	
1887-88	14,724	1,928	8,416	10,344	4,380	79,313	19,828.	
1888-89	49,832	2,880	8,283	11,163	38,669	82,210	20,553.	
1889-90	34,371	3,304	7,610	10,914	23,457	77,258	19,315.	
1890-91	21,009	2,559	3,785	6,344	14,665	65,726	17,181	
Total	129,523	12,996	37,321	50,317	79,206	402,502	101,376.	

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J. S. Sherlock Hubbard
Offg: Examiner P. W. Accounts,
Madras.

Madras
23rd October 1891

(C. No. 1201/5.)

KEEP-WITH CURRENT No.

dated 189 .

GOVT. OF MADRAS. } 1891 . { P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

Madras, 23 October 1891 .

OFFICE NOTE No. 6451

To

W.

With reference to G.O.No.3174 W. dated 2nd.December 1886, I forward herewith a report on the working of the Presidency Workshops during the official year 1890-91.

Offg.C.

(Enc: 1).

3000—3-2-91.

P. W. CURRENT No. 11241

No. 3174-W4/2-12-96
" 3201-W-3-12-90.

Encl: 6.
Rec'd: 24-12-90

Report on the working of the Presidency Workshops for the official year 1890-91, prepared in accordance with G.O.No.3174 W. dated 2nd.December 1886.

The following is the account of direct receipts and charges of the shops during the year (vide statement marked A).

2. The following items under charges in this statement call for remarks -

(a) Item 8 - Cost of practical training of students of the Civil Engineering College. This credit item of Rs.436-12-3 is a write-back under G.O.No.1740 W.dated 21st.June 1890, of the charges incurred in 1889-90 for labour and materials used by the Civil Engineer students undergoing practical training in the Workshops.

(b) Item 9 - Establishment. The expenditure under this item is less than that of the previous year, by Rs.6,072-1-3. This is due, (1) to the difference in salaries of Colonel Clarke who proceeded on leave, and of Mr.Wickham who was appointed to officiate for him as General Superintendent from September 1890, (2) to the employment in Periyar No.1 Division of Mr.Francis, Hony.Asstt.Engineer for a few months, (3) to the transfer to the Presidency Division of a supernumerary draftsman, (4) to the substitution of a clerk in the 4th.Class 2nd.Grade for a clerk of the 3rd.Class 2nd.Grade, & (5) to increased outturn of work for other departments.

3. The Revenue or Profit and Loss account of the shops is shown in the following statement:- (vide statement marked B.)

4. Item (8), Loss Rs.21,008-14-0, includes Rs.2,558-10-11 on account of leave and pension allowances and Rs.3,785-0-0 for interest on capital account. These two items amounting to Rs.6,343-10-11 are only "paper transactions" (see para 13), so that excluding these charges the direct loss on the operations of the year was Rs.14,665. Against this loss should be considered what it would have cost the department to get its own work done outside, and assuming the saving to be 25 per

cent on cost of outturn - which is the rate charged by the Workshops to other departments, this saving would amount to Rs. I5,349 (viz 25 per cent on Rs.6I,398 the value of work done for the P.W.D.). The financial result of the operations of the year would therefore be a gain of Rs.684.

5. Two items have for the first time been introduced in statement B, viz -

No.7, under Receipts showing a profit on Foundry of Rs.I,I85-I0-6

which indicates that the rate on which this profit is calculated should be frequently revised so that the account shall balance itself at the close of each year; and

No.8, under charges showing a loss on General charges of Rs.I,888-8-II

This shows that the I0 per cent at present charged as Workshop centages does not cover the general charges of the shops. Instead of increasing the percentage, I think every effort should be made to reduce the general charges by more economical working.

6. The balance sheet on capital account as it stood on the 3Ist. March I89I is as follows -

(vide statement marked C.)

7. Item 5 - Machinery and Plant, Rs.I33-8-II represents the value of 8 Pulleys issued to the Medical Store Department, II large hangers broken up for old iron, and 5 benches used up by the Engineer Students undergoing practical training.

8. It will be seen from statement C & the statement below that the additions to capital during the year were Rs.I,I09-3-8 under Block, and Rs. I,864-8-9 under Machinery and Plant, and that the total capital of the shops at the end of the year stood at Rs.I,93,I85-7-3, or Rs.2934-II-6 more than the balance at the end of I889-90.

	Opening Balances G.O. No 2320 W. dated 3 December 1890.			Closing Balances.		
Block	78,766	8	6	77,512	10	5
Machinery and Plant	106,347	10	11	103829	12	9
Workshops Manufacture Suspense	10,717	1	9	18924	13	10
Miscellaneous Advance	692	8	9	85	15	11
Cash Balances	47	3	2	93	2	1
Total	196570	15	1	200446	7	0
Deduct arrears due to workshops manufacture suspense	5429	3	4	6,786	10	5
Deposits	890	11	-	474	5	4
Total	6320	3	4	7,260	15	9
Capital	190250	11	9	193185	7	3
Increase to capital during 1890-91	2,934	11	6			
Total	193185	7	3	193185	7	3

9. The outturn of work is valued at Rs.I,22,970-II-5 against Rs. I,24,3I6-8-0 in the previous year showing a decrease of Rs.I345-I2-7.

I0. The following statement compares the value of out-turn during the year under review with that of the preceding year:-

	1889-90			1890-91			Differences.				
Work done for the Public Works Department	77257	12	2	6398	2	5	0531	14	1	less	than in 1889-90
Military Works Department and State Railways				7327	11	8					
Work done for other Departments	43167	6	8	50877	3	7	7709	13	1	more	
Work done for private parties	3291	6	2	3367	9	7	023	11	7	less	
Total	124316	8	-	122970	11	5	1345	12	7	less	

17 # 0 9 8 10

II. With reference to the charge for interest on capital outlay (item 9 ,Charges,in statement B) it is necessary to bring to notice that interest was charged in I889-90 and I890-9I for the full twelve months in each case on the capital as it stood at the close of each year,while in other years,the calculation was made on the capital at the commencement of the year. Neither of these methods appears to be correct as in the former case additions to capital during the year were charged with interest for the full year,and in the latter case interest was not allowed on reductions of capital during the year.

I2. I have therefore revised the calculations of interest since I880-8I the earliest year for which figures are readily obtainable, with the result that the loss on the shops ~~to end of~~ during I890-9I is reduced from Rs.24,95I to Rs.2I,009,the overcharge of interest having amounted since I880-8I to Rs.3,942; and I have shown this difference as a deduction entry in the Profit and Loss Account now submitted, (vide item 9,Charges,in the statement B and the detailed statement B/I appended).

I3. In para 4 it was said that charges for interest on capital & for leave and pension allowances were only "paper transactions"- that is to say no charges of either kind are included in the price of outturn -- and it therefore appears desirable that such charges should be eliminated in considering the financial results of workshops such as these.

I4. The Presidency Workshops are not maintained for commercial purposes,but their existence is due to departmental necessities, and, as far as I can judge ,the simplest test of their financial success is the saving or loss to ourselves on the work done in them for the department.

I5. In para I6 I give a summary of the results of the past five years transactions. I do not go further back because in the 5 years prior to I886-87,when the shops worked at a profit of Rs.27,822 exclusive of charges for interest and leave and pension allowances;(i) the percentages then charged to other departments were abnormally high, and (ii) the accounts did not show separately the value of work done (a) for the P.W.D. and (b) for other departments. Those accounts therefore afforded no means of comparison with present results.

I6. Since I886-87,however,-that is during the past 5 years

(i)the total loss including interest and leave and pension allowances,has been.....Rs.I,29,523

(ii)the loss excluding those indirect charges has been,, 79,206

(iii)the value of work done for the P.W.D. has been...,, 4,05,502

(iv)25 per cent on this would be.....,, I,0I,376

Details of these figures will be found in enclosure D.

(i) may be called the loss under commercial principles,and taking (iv)as the amount we have saved -- that is on the assumption that we turn out work as cheaply and as of good quality as outside shops doby doing our own work,instead of having to go outside for it,we have lost Rs.28,I47 (I,29523 - I,0I,376) during the past 5 years;but if we omit charges for interest and leave and pension allowances (ii) the shops have been worked at a profit of Rs.22,I70(I,0I,376 - 79,206).

I7. Instead,therefore,of the present three statements of account (enclosures A,B and C) that are submitted for these workshops,annually,I would propose one simple statement with a brief note bringing to notice -

I. the additions and reductions to Block and Plant during the year as in para 8 of this report.

ii. the result of the year's working as shown in para I6, omitting the first item.

iii. any other points of importance connected with the accounts.

The following is the proposed form, in which I show the results of last years working by way of illustration.

Item No.	Receipts.	Amount	Item No.	Charges.	Amount
I	25 per cent on value of work done for other departments & the public.	I2,3I4	I	Establishment.....	I8,276
2	Sale of old materials..	I22		Repairs -	
3	Miscellaneous receipts	- I6	2	to machinery..... I,066	
4	Pay of an engraver charged to jobs by credit to Establishment.....	360	3	to tools & plant.. 790	I,856
5	Profit on foundry.....	I,I86		Depreciation -	
6	Loss on the year's working (vide para 4).....	I4,665	4	of Block at 3 per cent on..... 2,363	
				of machinery and plant at 4 per cent on..... 4,249	6,6I2
			6	Loss on general charges...	I,889
		28,633			28,633

Every item in this statement is based on facts, and the form is submitted for the favourable orders of Government.

J. S. Sherlock-Stubbard

Offg. Examiner P.W. Accounts Madras.

Madras,
23rd October I89I.

A

Presidency Public Works Workshops

Account of Direct Receipts and Charges of the Workshops during the year 1890-91.

Item No.	Particulars of receipts	Amount
	Receipts	
1	Cash Balance	47 3 2
2	Cheques of Public Works Officers	11,72,35 9 6
	III Items adjustable by Civil Department	
3	Miscellaneous	23 ― ―
	IV Items adjustable by Public Works Department	
	Inter-departmental charges to Public Works Department	
4	Forest Department	118 12 10
5	Other Departments	77 ― ―
6	Central adjusting Account	477 5 3
7	Telegraph Department	25 12 9
8	Transfers Public Works Department	30,260 8 8
9	Guaranteed Railways	250 ― ―
10	Provincial Revenue Receipts	6741 ― ―
11	Income Tax	390 13 3
12	Deposits	4,505 3 5
	Total	160153 3 10

Item No.	Particulars of charges			Amount
	Charges			
1	Payments into Treasuries			3,261 9 1
	III Items adjustable by Civil Department			
	Inter-departmental charges by Public Works Department			
2	Forest Department			426 1 3
3	Other Departments			41717 4 4
4	Central adjusting Account			6754 1 11
5	Transfers of the Public Works Department			74008 13 10
	Expenditure against Provincial Budget Grant.			
6	Original Works		1109-3-8	
7	Repairs	1502-4-7	~~1109-3-8~~	
8	Cost of practical training of the students of the College of Engineering	436-12-3		
	Net debit to Repairs		1065-8-4	
9	Establishment	18276-4-8		
	Deduct credits on account of 10 per cent on the value of work done for other departments and private parties ― 1,525 ― ―			
	Pay of Tythials [illegible] regular establishment charged to jobs by credit to Establishment 360 ― ―	-4,885 ― ―	13391-4-8	
	Tools and Plant			
10	New Supplies 1864-3-2			
	Deduct value of articles transferred to other Departments 133-8-8	1730-10-10		
11	Repairs and Carriage	789-12-2		
12	One per cent deduction	-452 ― ―	~~2068-8~~ 2068-8	
	Add net debits to suspense			
13	Miscellaneous Advances		-606-8-10	
14	Workshop Manufacture Suspense	13637-4-5		
15	Deduct arrears unpaid	6786-10-5	6850-10―	
				2 3878 9 10
16	Deposits			2921 9 1
17	Cash balance			93 2 1
	Total			160153 3 10

3067/12

Madras
23rd October 1891

S. L. Sherlock Hubbard
Offg. Examiner of P.W. Accounts, Madras.

Present

B

Presidency Public Works Workshops
Revenue or Profit and Loss Account during the year 1890-91

Item No	Particulars of receipts	Amount			Item No	Particulars of charges		Amount		
	Receipts					**Direct charges**				
	To Provincial Revenue Receipts					**Working Expenses**				
a 1	1¼ per cent on Rs 48743 value of work done for other departments and the public — 6824-0-0				1	By repairs — 1502-4-7				
2	Sales of old materials — 122-8-0				2	Deduct cost of practical training of students of the College of Engineering — 436-12-3 —	1065-8-4			
3	Miscellaneous (less Refunds Rs 120-14-0) — 15-9-9	6930	14	3	3	By Establishment —	18276-4-8			
	To Establishment				4	By Tools and Plant repairs —	789-13-2	20131	10	2
b 4	1¼ per cent on Rs 50035 value of work done for other departments and the public —	5003	—	—		**Indirect Charges**				
	To Tools and Plant					By depreciation —				
c 5	One per cent on Rs 48743 value of work done for other departments and the public —	487	—	—	5	Block at 3 per cent on —	2362-15-9			
6	To pay of Engraver Vythialinga Acharry of the regular establishment charged to tools by credit to establishment	360	—	—	6	Machinery and plant at 4 per cent on —	4248-9-0	611	8	9
7	Profit on foundry —	1105	10	6	7	By leave and pension allowances at 1¼ per cent of Rs 18276-4-8		2558	10	11
8	To Loss —	21008	14	—	8	Loss on general charges —		1888	8	11
					9	By Interest on Capital at 4 per cent of Rs 193185-7-3 — 7727				
						Deduct Interest overcharged since 1880-81 as detailed in statement B/1 (see para —	3942	3785	—	—
	Total	34975	6	9		Total		34975	6	9

a Total value of work done for other departments and the public — Rs 48603
Add value of work done for Military Works Department in March 1890 on which percentage was not charged until 1890-91 — Rs 1432
Rs 50035
Deduct value of work done for Military Works Department in February & March 1891 on which only 10 per cent for Establishment was ordered to be charged — 1292
Rs 48743

b Rs 48603 + 1432 as above — Rs 50035

c Same as a — Rs 48743

J. L. Sherlock-Hubbard
Offg. Examiner of P. W. Accounts, Madras

B/1

Statement showing the difference in the calculations of interest charges as made in previous accounts and as revised in accordance with the principles adopted in the Irrigation and Railway Branches

Years	Capital			Amount on which interest should have been calculated.	Interest charges		Difference of interest	
	Opening Balance	Closing Balance	Increase or decrease of Capital		As now calculated	As previously calculated	Over charged	Under charged
	Rs	Rs	Rs		Rs	Rs	Rs	Rs
1880-81	417620	35922	-61698	417620 at 5 per cent Less 61699 at 2½ per cent	20881 1542 19339	20877	1565	3067/14
1881-82	355922	239946	-115976	355922 @ 4% Less 115976 @ 2%	14237 2320 11917	13286	1469	
1882-83	239946	179969	-59977	239946 @ 4% Less 59977 @ 2%	9598 1200 8398	9639	1241	
1883-84	179969	200776	20806	179969 @ 4% Add 20806 @ 2%	7199 416 7615	7223	-	392
1884-85	200549	220430	19881	200549 @ 4% Add 19881 @ 2%	8022 398 8420	8080	-	340
1885-86	220430	230684	10254	220430 @ 4% Add 10254 @ 2%	8817 205 9022	8881	-	141
1886-87	230684	210388	-20296	230684 @ 4% Less 20296 @ 2%	9227 406 8821	9227	406	-
1887-88	210388	207063	-3325	210388 @ 4% Less 3325 @ 2%	8416 66 8350	8416	66	
1888-89	207063	198226	-8837	207063 @ 4% Less 8837 @ 2%	8283 177 8106	8283	177	
1889-90	198226	190251	-7975	198226 @ 4% Less 7975 @ 2%	7929 159 7770	7610	-	160
1890-91	190251	193185	2934	190251 @ 4% Add 2934 @ 2%	7610 59 7669	7727	58 2975	1035 3962

8

Madras.
23rd October 1891

7

J. F. Nesbitt - Hubbard

Offg: Accountant G. W. Accounts,
Madras.

C

Presidency Public Works Workshops

Capital Balance Sheet as it stood on the 31st March 1891.

Item No	Capital and liabilities	Amount			Item No	Property and assets		Amount		
	Capital					**Block**				
1	Capital of the Shops	193125	7	3	1	Balance on 1st April 1890	78766-6-6			
					2	Depreciation at 3 per cent	-2362-15-9	76403-6-9		
	Debits				3	Additions during the year	1109-3-8	77512	10	5
2	Deposits (refundable)	474	5	4		**Machinery and Plant**				
3	Value of labor and materials on workshop jobs not paid for	6786	10	5	4	Balance on 1st April 1890	106347-10-11			
					5	Deduct book value of articles transferred to other departments & broken up	-133-8-11			
					6	Depreciation at 4 per cent	-4248-9-0	101965-9-0		
					7	Additions during the year	1864-3-9	103829	12	9
						Suspense Account				
					8	Miscellaneous advances	85-15-11			
					9	Workshop Manufacture suspense	18924-13-10	19010	13	9
					10	Cash (cash balance)		93	2	1
	Total	200446	7	0		Total		200446	7	0

3067/95

J. S. Sherlock-Hubbard

Offg Examiner of P.W. Accounts, Madras

24/10

23 Madras Cotober 1891

3067/15

To W 3067/15 [illegible]

Annual report on the P.W. Workshops, with draft G.O., resubmitted on return from the Hm.

The Hm. has made no remarks on your note of 14th Inst., but has now passed the draft G.O., which will issue. (a)

The separate file on your table, relating to the working of the Workshops, might perhaps now be disposed of.

Ce
16/11/91

(a) Yes

(b) Hemboth

8

(b) returned by SAW

Don't print

Note for the Hrible Member.

3067/16

I have no information as to the nature of work done for other Departments, but will make enquiry in the matter if the Honorable Member wishes - The increase is however only since 1888/89, there having been a great falling off in that year; the figures were.

1887-88 . . . 64241

1888-89 . . . 31114

1889-90 . . . 43167

1890-91 . . . 50877

So that the value of work done in 1890-91 was actually less than in 1887-88 - Increase in value of work done for other Departments I do not look upon as an evil per se; I do look upon work done for private parties as an evil, and this I am glad to say is steadily decreasing, the figures

figures being—

1887-88 — — 6153

1888 - 89 — — 4705

1889 - 90 — — 3891

1890 - 91 — — 3367

The decrease of work for this Department is, I have no doubt, due mainly to — dissatisfaction with the way in which work was done in the Workshops — As a Superintending Engineer I had more than once to comment severely on the unsatisfactory manner in which orders were executed — There has been I think an improvement in this respect lately, but it has not had time — yet to produce any effect. The management of the shops before Mr Wickham took charge was certainly not creditable to the Department.

The last paragraph but one of my (E W) Note

Note was directed to this point—

8

W

3067/17

3067/17

P.W. Department.

Note by the Chief Engineer, Public Works Department, dated 16th December 1891.

Read 30673/18

Office note from the Examiner P.W. Accounts No. 6451 dated 23rd October 1891.

The Examiner's report on the working of the Presidency P.W. Workshops for the official year 1890-91 shows that there has been a falling off of Rs 1345-12-7 in the total out-turn of work and of Rs 8531-14-1 in the value of work done for the Public Works Department, as compared with 1889-90.

2. The profit and loss account (statement B) shows the loss on the year's transactions to be Rs 21,008-14-11 against Rs 34,370-8-7 in 1889-90. The actual loss on the year's transactions as per statement B was Rs

Rs 24,950-14-0 but the Examiner has reduced this to Rs 21,008-14 by deducting Rs 3942, interest on capital overcharged since 1880-81.

3. The Examiner points out that the loss of Rs 21,008-14-0 includes two items which are "paper transactions" Rs 2538-10-11 for leave and pension allowances and Rs 3785-0-0 for interest on capital, and that if these two items, amounting to Rs 6,343-10-11, be excluded the direct loss will be Rs 14,665. He also suggests that the saving in cost of work by the maintenance of a Govt. workshop as compared with the employment of outside agency may be taken at 25 per cent on the value of work done for the P.W.D. or Rs 15,349 which would rather more than balance the loss of Rs 14,665. Without accepting definitely the precise proportion of 25 per cent it may be ~~calculated~~ admitted that the convenience for administrative purposes of the maintenance of a Departmental workshop outbalances the small nominal loss which its operations entail.

10P

4. The Examiner in para 17 of his note suggests a simplification of the forms in which the several accounts are submitted to Government, but the undersigned cannot concur in this suggestion, and considers that the details now given are essential for the proper understanding of the operations of the year.

387/19

5. In para 6 of G.O. No. 3201W of 31st December 1890 the Chief Engineer was directed to consider whether the value of the shops to the Department justified their continued existence.

Having carefully considered this question it

the undersigned is of opinion that it must be answered in the affirmative. It is morally certain that the work which they do could not be done with equal certainty and economy by private agency, and that the loss which their maintenance involves would be nearly if not quite equalled by the extra cost of work done by such agency, which in many cases it is doubtful whether the latter could execute the work at all.

6. The undersigned thinks it right to say that he approached this question with a somewhat strong prepossession in favour of the abolition of the shops, but the evidence has compelled the conclusion that this abolition is undesirable.

Every effort should be made to reduce

11P

establishment and general charges, to economise labour, and above all by good work and prompt execution of orders, to secure a 30 per cent increased proportion of work for the Public Works Department, for the execution of which the shops are primarily maintained.

7. The execution of work for private parties should be discouraged as much as possible, and should in fact not be undertaken unless there is good ground for the belief that it cannot be done by private agency; it cannot be too strongly urged that the shops are maintained as a portion of the administrative machinery of the Public Works Department, and not

with the object of competing with private firms

D
EW. 10.11

WB
10.11.91

No. 3067 W, 5th Nov/91

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

3067/21

READ the following

office note from the Exr. P.W. Accts H.E. No. 6451 d/ 23rd Oct. 1891

note by the Chief Engineer P.W.D. H.E. No — d/10/11/91

12

Recorded.

2. The Government concurs in the remarks of the Chief Engineer.

HCS
15 Nov

I agree generally with W's note, but I should like to know what is the cause of the continued increase in the amt. of work done for other depts. & what is the character of that work. Also why the outturn for the DPW. is continually decreasing. I don't want reference on these points, but can W. throw any light upon them?

HCS
12 Nov.

WB
10.11.91

D
10.11

To
The S.E. VI Circle
Exr P.W. Accts

1/2/11
11-6-13

Govt. of 18 91 Madras.

PUBLIC WORKS.

Proof to the [illegible]
S.W. 16-11-91

16.11.91 30674

Presy: P.W. Workshops

Note by the Chief Engineer P.W.D. on the report of the working of the — for the offl. year 1890-91 recorded with remarks

22

[illegible]

16/11
4-50 P.M.