GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

4th April 1881, No. 914 W.

General.
Account.

Read the following papers:—

No. 22. From Lieutenant-Colonel H. L. PRENDERGAST, R.E., Superintending Engineer, First Circle, to the Chief Engineer, Public Works Department, dated Chepauk, 11th March 1881, No. 3,411.

With reference to G.O., No. 2,276 W., dated 1st October 1880, I have the honor to forward the Report of the Committee upon the superfluous stock in the Public Works Divisions.

2. The papers sent to me are returned, together with other documents that have been handed over for the Committee's consideration.

Report of the Committee appointed to investigate and report upon the Superfluous Stock in the hands of the Public Works Department, &c.

Vizagapatam Division, First Circle.—The value of articles on the stock register has already been reduced to Rs. 712, and out of this the value of asphalte is Rs. 593.

The Committee recommend that, as has been proposed by the Executive Engineer, the asphalte be charged at its book value to the Hill Jail works at Párvatipur. Upwards of 4 tons will be used there at a cost of Rs. 488, and there will remain in store a little over 1 ton to the book value of Rs. 105 to be charged to works hereafter as the supply may be used up.

2. In August last the Superintending Engineer directed the sale of articles of stock in the Ganjam District; these were small stores, metals, some wood and bamboos, painters' stores, and miscellaneous articles that had been lying by for some years and were useless, or not likely to be issued to works. The book value of the stock was Rs. 3,656-14-10, and the loss by auction sale has been Rs. 1,678-0-1. The various articles had been purchased on the stock account, not for any specific works; and the Committee recommend that the loss on the sale may be written off to Profit and Loss.

3. Cuddapah Division.—In the Bellary District stock has been ordered to be sold to the value of Rs. 2,005-12-11; there remains only one item, Rs. 153-9-8, the value of fuze which is not wanted and is unsaleable at Bellary.

The Committee recommend that this fuze be sent to the Public Works Stores at Madras to be disposed of there.

4. In the former Anantapur Division there are wooden doors and windows that have been on hand for some time to the value of Rs. 2,621-4-4. The Superintending Engineer has kept these articles to see whether the Sub-Magistrate's Cutcherry at Bookapatnam will be sanctioned in the year 1881-82. Unless the stock can be transferred to this work, there is no prospect of the articles being turned to account; and the Committee recommend that, provided there is no entry in next year's budget for the Bookapatnam Cutcherry, the stock should be sold by auction.

5. In the Kurnool District stock to the value of Rs. 1,545-7-1 has been ordered to be sold; and the Committee recommend the further sale of wood-work prepared for a cutcherry to be built at Kurnool, as there is no likelihood of the articles being utilized for a long time to come. The book charges of these articles are Rs. 1,493-0-6, and there will remain only the sum of Rs. 151-8-5 on the stock register for the Kurnool District.

In the Cuddapah District there is no stock.

6. Nellore Division.—The value of stock in hand on the 30th September last was Rs 3,567-13-6. The Executive Engineer has proposed to send to Madras some iron posts to be melted; they are called iron calingulah posts, and are valued at Rs. 807-7-3; but as calingulahs have been given up, the posts are of no use. There are graduated strips of papers meant to be pasted on levelling staves; these being obsolete, the Executive Engineer proposes to destroy them;

the book value is Rs. 6-4-9. There are two items, viz., glass tubes and steam gauges, Rs. 101-1-0, and leather belts, Rs. 45, which the Executive Engineer would transfer to another division, as there is no probability of their being used at Nellore.

The Committee recommend that these articles be sent down to the Public Works Stores at Madras for disposal excepting the useless paper scales.

The Superintending Engineer lately authorized the sale of articles entered as of the value of Rs. 2,263, but as yet those of the book value of Rs. 1,303 have been sold, leaving the sum of Rs. 960 to be cleared off. The value of stock will then become reduced to Rs. 1,648.

There are some tons of old and useless cast iron truck wheels at Nellore that have been charged to the Anicut works. Correspondence has been lately going on with a view to the Superintendent of the Workshop at Madras taking over the wheels as old iron.

7. The wood-work that has been sold in the Kurnool District was made up for a Taluk Cutcherry at Nandyál; the building has not otherwise been begun, but an estimate will shortly be submitted for sanction. The Committee recommend that the loss by sale of the materials that were made up ten years ago be charged to this future estimate.

The materials for barracks at Bellary were ordered to be prepared on the stock account in G.Os., Nos. 2,261 and 2,274, of the 24th and 25th September 1872; but further barrack accommodation has not been required, and is not likely to be called for, and no estimate has been made.

The other wood-work at Anantapur and Kurnool was made up in anticipation of cutcherries being built, but the buildings have not been commenced, and there are no estimates framed for them.

The Committee therefore are of opinion that the loss by sale of these building materials and of the two useless items in the Nellore Division must be written off to Profit and Loss.

8. UPPER GODAVARI.—The Superintendent of Works sent with his letter, No. 2,120, of the 20th September 1880, three lists of articles of all kinds lying at Dumagudiem. Mr. Walch proposed to keep there a certain quantity of machinery and stores; to sell a portion on the spot; and to remove the rest to Dowlaishweram. Mr. Walch proposes—

(1.) To sell at Dumagudiem, or to keep for transfer to any Public Works Division that may make application, the machinery not required for the works at Dumagudiem; and to advertise the machinery for sale there, as it would not pay to send the machinery to Calcutta or elsewhere by sea.

(2.) To keep at Dumagudiem the survey and mathematical instruments that are wanted there; to send a few to Dowlaishweram and the rest to the Public Works Stores at Madras.

(3.) To sell at Dumagudiem two wooden flats that are in bad order; to keep the boats and punts that are wanted on the works; and to transfer one jolly boat to Dowlaishweram.

(4.) To keep at Dumagudiem one cart gun carriage; to sell the others; and to sell or transfer 200 tramway wheels.

(5.) To sell a portion of the timber at Dumagudiem; to keep there for use a small supply; and to remove the rest to the Dowlaishweram Workshop on the terms laid down in G.O., No. 3,153 W., of the 5th August 1878.

(6.) To sell nearly all the metals at Dumagudiem, keeping a reserve there, and sending a small supply to Dowlaishweram.

(7.) To keep a portion of the small stores and miscellaneous articles at Dumagudiem, and to sell the remainder there.

The Committee have referred to Mr. Walch for some further details of his intended distribution of the stores, and some slight modifications have been made. The result is shown in the enclosed abstract statement, which gives the number of items, with their value, to be kept and sold, in separate columns for Dumagudiem and Dowlaishweram.

The Committee recommend that the Government property be disposed of as shown in this abstract, whereby articles of the book value of Rs. 52,713 will be sold as surplus or not in good condition; articles valued at Rs. 18,408 will be kept; those to the value of Rs. 12,747 at Dumagudiem and of Rs. 5,661 transferred to Dowlaishweram. Of the stock, &c., kept in hand, there is machinery valued at Rs. 6,960 and timber valued at Rs. 5,790, so that the value of tools, floating stock, and other stores to be retained at Dumagudiem will be brought down to Rs. 4,405.

The Committee are of opinion that the loss of sale of machinery, floating stock, rolling stock and London stores should be charged to Works; and that the Superintendent of Works should specify the estimates to which the charges of loss shall be debited after ascertaining, as far as possible, for which specific works the different articles were purchased. The loss on the other stores cannot be much; the small stores, timber, and miscellaneous articles were obtained for general purposes; and the Committee recommend that the loss by sale be written off to "Profit and Loss."

UPPER GODAVARI.

ABSTRACT of Lists of Articles at Dumagudiem and of the proposed distribution of them.

Description of Articles.	To be kept at Dumagudiem.		To be sold at Dumagudiem.		To be taken to Dowlaishweram				Remarks.
					To be sold.		To be kept.		
	Item Number.	Value.	Item Number.	Value.	Item Number.	Value.	Item Number.	Value.	
List No. 1.		RS. A. P.		RS. A. P.		RS. A. P.		RS. A. P.	
Small Stores	17	539 7 8	28	3,767 13 3	6	174 9 1	...	...	
Building Materials	1	169 3 11	...	...	...	...	...	..	
Timber	...	1,930 0 9	...	11,218 0 0	...	...	...	3,860 0 0	
Metals	...	500 0 0	* 11	10,758 12 2	...	...	3	1,109 8 8	* The value of the 11 items is Rs. 11,258. The Superintendent of Works desires to retain metal to the value of Rs. 500 out of the above.
Miscellaneous	7	79 5 11	11	101 4 0	2	4,344 1 4	...	...	
List No. 2.									
Survey and Mathematical Instruments.	16	251 0 0	...	...	...	...	3	33 0 0	Fifteen other items are proposed to be sent to Madras, their value being Rs. 295.
Machinery	19	6,451 0 0	17	3,642 0 0	1	350 0 0	5	509 0 0	
Floating Stock	6	715 0 0	2	100 0 0	...	...	1	100 0 0	
Rolling Stock	1	400 0 0	4	1,416 0 0	...	*692-0-0	...	...	
Tools	66	1,292 5 0	61	3,169 1 9	...	~~692 0 0~~	...	...	
Furniture	16	408 8 0	1	40 0 0	21	...	...	...	
London Stores	...	...	2	11,910 0 0	...	...	...	...	
List No. 3.									
Machinery	...	...	2	60 0 0	...	...	1	50 0 0	
Tools	3	14 0 0	5	54 0 0	4	53 0 0	...	...	
Rolling Stock	...	...	2	184 0 0	...	...	...	...	
Small Stores	...	...	10	471 0 0	...	...	...	...	
Furniture and Fittings ...	2	6 0 0	3	203 0 0	1	5 0 0	...	...	
Total ...	...	12,746 15 3	...	47,094 15 2	...	5,618 10 5	...	5,561 8 8	
		RS.		RS.		RS.			
To be sold		...		52,713		...			
To be kept		18,408		...		71,121			
Value of instruments to be sent to Madras ...						295			
Total ...						71,416			

* vide G.O. No. 1350 W. of 20 May 81 (Ch. No. 316 of 81)

9. GODAVARI—IRRIGATION—FLOATING PLANT.—The Committee have examined the statement of floating plant to be maintained in the year 1881-82 as printed in G.O., No. 550 I., dated 26th August 1880.

"*Thistle.*"—The machinery of this steamer is entered as old and worn; but the Superintendent of Works states that the machinery is repairable, and the boat useful; he recommends that she should not be sold.

"*Little Nell.*" "*Fawn.*"—These two steamers are to be advertised for sale by the Superintendent of Works.

No. 12 Iron Trap Punt is entered as sunk in a main canal. Enquiries having been made why an annual maintenance is proposed, and the duty shown to be that of conveying silt, it is explained that attempts will be made to raise the punt when the canal is closed with a view to her being brought into use again.

No. 97 Iron Flat is stated to be too unwieldy for general use; but it is explained that the flat is useful on particular occasions, and the Superintendent of Works thinks she ought to be kept.

Range Boat No. 5 has already been sold, and Range Boats Nos. 9 and 10 are to be sold shortly.

The rest of the floating plant is said not to be in excess of requirements or in unserviceable condition.

A list of the floating plant in the Godávari District is sent up annually to the Chief Engineer for Irrigation, in order that provision may be made in the budget; and the Committee have no further remarks to make on this head.

The cost of the *Fawn* has been charged to the Capital Account, Productive Public Works, of the Godávari Delta; the sale proceeds are therefore to be credited to receipts on that Capital Account.

The cost of the *Little Nell* has been charged to general plant of the Godávari Eastern Delta, and the sale proceeds are to be credited to the Revenue Account, Tools and Plant, Productive Public Works, Godávari Delta.

10. STEAMER "PRINCE."—The Steamer *Prince* was ordered to be sold by the Marine Department in G.O., Public Works Department, No. 587, of the 22nd February 1877. A sale has not been effected, and in G.O., Judicial Department, No. 1,396, of the 8th August 1879, a telegram is recorded directing the Collector of Cocanada to have the *Prince* taken over the anicut for use at Rajahmundry. On a question raised by the Accountant-General as to the incidence of charges connected with the *Prince*, it was laid down in G.O., Judicial Department, No. 2,742, of the 24th October 1879, that "the *Prince* is maintained from Port Funds," but all special additional charges, *i.e.*, not ordinary charges, are to be debited to the department on whose account they are incurred.

On the 2nd September 1880 the Master Attendant wrote to the Chief Secretary that the Marine Department has no need of the *Prince*; that the vessel has not been taken over for the use of the Marine Department; and that she is employed under the orders of the Public Works Department. The Superintendent of Works, Godávari, states in his letter, No. 1,997, of the 20th October 1880, that the *Prince* was handed over to the Master Attendant at Cocanada on the 21st December 1876, and that she was by the Marine Department placed at the disposal of the Military Department in 1879, the Public Works Department having nothing to do with her beyond carrying out some repairs and supplying some fuel at the request of the Military authorities.

The Committee believe that the *Prince* is no longer required at Rajahmundry by the Military Department; and as she was condemned nearly four years ago, the Committee recommend that she be sold at an early opportunity. Again, as the vessel was ordered to be sold by the Marine Department in February 1877, and her maintenance was made chargeable to Port Funds, the Committee are of opinion that the present charge and arrangements for sale should be in the hands of the Marine Department.

The *Prince* was originally charged to general plant, and the sale proceeds will be credited to the Revenue Account, Tools and Plant, Productive Public Works, Godávari Delta.

11. DOWLAISHWERAM WORKSHOP.—The Executive Engineer in charge of the Workshop considers that there is no stock in excess of requirements. The value of the stores in hand on the 31st October 1880 was—

	RS.	A.	P.
Stores	43,450	3	8
Timber	21,311	11	9
Manufactured Articles	4,742	5	3
Total ...	69,504	0	0

The average value of issues during the last three years has been—

	RS.
Stores	28,498
Timber	18,260
Manufactured Articles	11,527
Total ...	58,285

The Superintendent of Works also states that there is no unnecessary stock in hand. But the above figures show that while the manufactured articles have been brought down to less than a half year's issues, there are still stores to last for 18 months and timber for 14 months.

The Committee are of opinion that endeavours should be made to keep the value of stores in hand within Rs. 30,000.

12. GODAVARI WESTERN DIVISION.—The stock return shows only some building materials the value of which is less than Rs. 1,000.

13. GODAVARI EASTERN DIVISION.—The stock in hand on the 30th September 1880 consisted of—

	RS.	A.	P.
Materials at Dowlaishweram valued at	10,971	9	7
Stores at Dumagudiem	38,529	5	1
Stores kept at the Sappers' Cantonment	13,563	14	7
Total ...	63,064	13	3

The total amount standing in the Examiner's books to the debit of the division is Rs. 94,565-11-7, and the Executive Engineer explains that the difference of Rs. 31,500-14-4 is the amount of stock manufacture and carriage which has not been included in the stock register. The stores at Dumagudiem have been dealt with under the head of Upper Godávari, and deducting their value from the total debit, there remains the sum of Rs. 56,036-6-6 as the book value of the stock in hand. The stores in the Sappers' Cantonment consist chiefly of metals valued at upwards of Rs. 11,000, while the value of small stores is Rs. 2,185. The Committee consider that, whereas there are large stores in the Workshop close by, these items are not necessary, and that the manufactured articles of the value of Rs. 31,500 are much beyond the requirements. The issues in the past year have been to the value of Rs. 34,618, and while there appears to be the need of keeping in hand a considerable supply of stone and other materials at Dowlaishweram, the Committee think that the value of stock in hand ought to be brought down to Rs. 20,000. The large balance under the head of Manufactured Articles may be reduced by suspending further manufacture until the reserve limit is attained.

14. KISTNA WESTERN DIVISION.—There is no stock.

KISTNA EASTERN DIVISION.—The stores of the Kistna Workshop have recently been amalgamated with those of the Eastern Division. The Executive Engineer reports that the stock in hand on the 30th September 1880 was of the value of ... Rs. 58,695 0 0
And the value of manufactured articles is given as ... „ 19,940 0 0
Total ... Rs. 78,635 0 0

The Superintendent of Works has stated that he thinks there should be a maximum reserve of about Rs. 48,000 arrived at thus:—

	RS.
Small Stores	1,000
Building Materials	5,000
Timber	20,000
Metals	9,500
Miscellaneous	4,500
Manufacture in Workshop and Quarries and Kilns	8,000
Total ...	48,000

The average value of issues during two years is given by the Superintendent of Works as Rs. 5,046 per month, while the value of the balance of stock on the 1st October 1880 was Rs. 58,695, or nearly twelve months' supply. But while the stock balance in hand of some items is moderate, in others it is very high; thus there is a supply of small stores for eighteen months—

Timber	21·6
Metal	28·4
Painters' Stores	21·2

The Superintendent of Works proposes to retain stock articles to the value of Rs. 43,468, to be used up within the next eighteen months, and to dispose of articles to the value of Rs. 15,227. The Executive Engineer's list, dated the 24th December 1880, shows the proposed method of dealing with stock, viz., some items to be sold locally at Bezváda and other items to be sent either to Dowlaishweram or to Madras.

As there are already more stores than are wanted at Dowlaishweram, the Committee are of opinion that the superfluous stock at Bezváda should be sent to Madras to the Public Works Stores for disposal. The enclosed list shows that the book value of these stores is Rs. 13,488-10-7.

The same list shows various articles which may be sold at Bezváda, their book value being Rs. 1,738-14-10. These stores have all been purchased on the General Stock Account, and thus the loss by sale will have to be charged to Profit and Loss.

15. The Executive Engineer has furnished another list, enclosed, dated the 7th January 1881, of machinery and tools and plant that are not required in the division. The list contains twelve items that may be sold on the spot; twenty-two items that cannot be disposed of locally; and two items of wagons, of which a part can be kept and the rest should be sent away.

The Superintendent of Works recommends that the old cast iron articles should be sent to Dowlaishweram for the foundry. There are old machines, blocks, log wheels, &c., which will not be used where they are, and are not likely to be sold there.

A good deal in the way of superfluous machinery and plant is proposed to be offered for sale in the Godávari District; and the Committee think that it will be preferable to send the stores by canal to Madras, to be disposed of by the General Superintendent of Public Works Stores.

The items in this list have already been charged to Works, and the sale proceeds will be credited to the sources from which payment was originally made; if from Revenue, credit will be given to Tools and Plant; and if from Capital, to Receipts on Capital Account.

16. On the subject of the stock reserve the Superintendent of Works writes that, though the amount set down by him for timber is high, viz., Rs. 20,000, his reasons are that, as a rule, there are no local markets; that when required a year's supply would have to be bought at Cocanada or Coringa, and it might happen that the annual supply could not be got round before the closing of the canals in March. A good stock of large timber is required for heavy works, such as lock gates, and inconvenience will occur if the stock is kept too low.

Upon this explanation the Committee are of opinion that a liberal margin may be necessary in calculating the limit of the general reserve stock; but they still think that this should not be set down at a higher figure than Rs. 20,000.

LIST of Surplus Stock not required in the Kistna Eastern Delta.

To be sent to Public Works Stores.

			Book Value.		
			RS.	A.	P.
Plumbago	lb.	979	195	14	6
Angle iron of sizes	,,	33,962	3,450	0	0
Crane bearings, cast iron	,,	797			
Flat bar iron	,,	21,613	1,447	0	5
Sheet iron	lb.	64,129	6,901	12	6
Crucibles, large	No.	100	70	11	3
Stoney's valve	,,	1	1,423	3	11
			13,488	10	7

To be sold at Bezváda.

Yapee wood	c.ft.	360	155	7	2
Railway old iron	...	...	189	0	1
Lead sheets	lb.	1,484	330	1	4
Sundry iron	,,	1,763	52	5	4
Copper, old	,,	60	22	3	4
Gun metal	,,	162	70	14	0
Three items of paint	,,	515	91	4	11
Oxide of lead and yellow clay	...	...	27	14	6
Wooden gates	...	...	4	13	10
Leather, Madras and Europe	lb.	350	404	7	3
Camp stools and canvas, do.	No.	18	25	13	2
Small board	...	...	0	7	9

Spurs	No.	2	4	10	7
Iron cot	,,	1	18	15	4
Copper plate	,,	1	13	7	1
Water tubs on wheels	,,	5	7	8	0
Venetian windows	,,	14	241	0	0
Bandy wheel	,,	1	23	0	0
Semi-circular windows	,,	3	36	0	0
Wooden leg	,,	1	6	3	6
Salvages	,,	17	11	6	4
Telegraph wire	,,	36	1	15	4
			1,738	14	10

LIST of Machinery and Tools and Plant no longer required in the Kistna Eastern Division.

Class.	Item No.	Names of Articles.	Balance.	Remarks.
Machinery.	42	Machine, stone-breaking	3	Cannot be sold or disposed of locally.
	50	Pump, portable, double	1	Do. do.
	...	Machine, brick-making, with pug mill.	1	Do. do.
	...	Machine, hulling, with under-shot water wheel and pieces.	1	This is believed to be an air engine, but it is not known why or when it came here, and it cannot be disposed of here.
	...	Air engine	1	Might be auctioned here.
	...	Axle with one wheel	109	These are flanged wheels for trucks.
	...	Do. with Calcutta wheels	1	Do. do.
	...	Do. Dowlaishweram with wheels	107	Do. do.
	...	Do. do. wheels	12	Might be auctioned here.
	...	Barrow wheels	2	For screwing up wooden beds.
	...	Bed keys	34	These are really old paint kegs, and should not appear in the tools return. They might be disposed of here or kept for sending out tar, &c.
	...	Barrels, iron, empty	1	Might be sold here.
Tools and Plant.	...	Bill crank for old wooden pump	5	Do.
	...	Brick moulds, brass, solid	19	Do.
	...	Do. do. bind	2	Could not be disposed of here.
	...	Blocks, iron, quadruple, 12 inch	2	Do. do.
	...	Do. do. 10 ,,	2	Do. do.
	...	Do. do. 9 ,,	2	Might be sold at Bezváda. Of old hand paddle boat.
	...	Cranks	4	Cannot be disposed of here.
	...	Calcutta wagon wheels	31	Do. do.
	...	Cog wheels of sorts	16	Cannot be disposed of here. Wrongly named; are really Pawl wheels
	...	Dog wheels	23	
	...	Dog iron	1	Might be sold here.
	...	Dressed Pegu teakwood logs	32	Do.
	...	Pinions for crane	7	Do.
	...	Pullies, crane	1	Do.
	...	Paddle wheel crank	12	Five to be kept.
	...	Wagons, complete	40	Cannot be disposed of here.
	...	Do. wheel, pairs	16	Four to be kept.
	...	Do. side tip, with fittings	8	Do.
	...	Wheels, large, for Dowlaishweram crane.	8	Do.
	...	Do. for crane	8	Do.
	...	Do. iron wagons, pairs	1	Do.
	...	Do. large, Calcutta, axle	1	Do.
	...	Wooden wheel, old	1	Might be sold here being useless.
	...	Old boiler (not in lists)		

BEZVADA,
7th January 1881.

(Signed) J. D. GRANT,
Executive Engineer, Eastern Division.

17. COIMBATORE DIVISION.—The stock balance at the close of September 1880 was only Rs. 779-11-9, of which the Executive Engineer proposes to retain all except two items valued at Rs. 32-4-0. He reports all can be used; the Committee therefore propose to accept his proposals, and recommend that the small unserviceable balance should be met by increase of rates on the remaining items.

18. PRESIDENCY DIVISION.—The stock balance in this division on the 30th September 1880 amounted to Rs. 2,063, of which the Superintendent of Works proposes to sell about 900 rupees worth, consisting chiefly of made-up doors and windows. It is clearly impossible to adjust this loss by increase of rates on the remaining articles of stock. The doors and windows were obtained for works the accounts of which are not yet closed; the Committee therefore recommend that the loss incurred by the sale should be debited to those works, the excess over estimate being covered by supplemental sanction, if necessary.

There is an item of 446 granite stones at Madras valued at Rs. 213-11-4. These stones have been on hand for some time; they are of no real value, but were brought away from old native buildings. The Superintendent of the Government Museum would be glad to take them over free of cost, and he would make use of the stones as posts about the Museum grounds.

The Committee recommend that the Superintendent of Works may be authorised to hand over the stones to the Superintendent of the Museum.

19. CHINGLEPUT DIVISION.—The stock balance on the 30th September 1880 was Rs. 4,332, of which Rs. 1,414-7-9 stand against an equilibrium valve which is stated to be in position at the Red Hills.

In regard to the rest, the Executive Engineer proposes to sell iron valued at Rs. 41-8-0 and worth, according to his estimate, only Rs. 10. Some granite stone, the book value of which is Rs. 1,614, the Executive Engineer considers not really worth more than Rs. 325. There is also gunpowder valued at Rs. 241, which it is stated is not required in the division.

The Committee recommend the following adjustments:—

(1.) The equilibrium valve should be charged to the work to which it was issued and on which it stands.
(2.) The loss incurred by the sale of the iron and granite stones to be debited to Profit and Loss, as the accounts of the works for which they were obtained have long since been closed.
(3.) The powder should be transferred to the Ordnance Department for deposit and issue when wanted by other parties.

20. MADRAS HARBOUR WORKS.—The stock balance on the 30th September 1880 stood at Rs. 1,88,048-3-5. The statement submitted contains proposals regarding items the book value of which is only Rs. 16,130. No returns have been received from the Superintendent for two years, showing what stock and tools and plant he actually has on hand; and until these are furnished the question cannot be dealt with. The Committee are consequently unable to make any recommendations. The subject is of the less importance, as the Madras Harbour Works will cease to exist as a division in another year, and all accounts connected with them will be finally closed.

21. NORTH ARCOT.—In this division there is practically no stock, the only article, valued Rs. 64-14-0, on hand being a rope. An early opportunity should be taken to charge this off to the work on which it may be required, and if such is not likely to occur, it should be sent to the Public Works Stores for disposal.

22. PRESIDENCY STORES.—The balance on hand on the 30th September 1880 was valued at Rs. 4,04,236-10-6. The Superintendent has submitted a list of the stores in stock divided into four classes:—

A. Articles not likely to be used within 18 months.
B. Articles which he considers should be kept in stock.
C. Articles the outright sale of which is recommended.
D. Stores received from district officers which can be repaired and kept for issue when indented for.

In regard to Class A, the Superintendent estimates that the sale of these articles by auction, or by tender, would probably involve a loss of about Rs. 98,000. Judging by past demands from the Railway Companies and the public generally for similar stores, he considers that if the extra percentages as per margin at present charged to other than public departments were removed, and the stores for sale extensively advertised, purchasers would be found. As the outright sale of these stores will undoubtedly involve heavy loss, and they are of exceptionally good quality, the Committee are of opinion that, before the outright sale is ordered, the proposals of the Superintendent should be tried for some time,

Instruments 15 per cent.
Machinery 17 ,,
Tools and plant 20 per cent.
Stock 22 per cent.

not only for the stores enumerated in Class A, but for all those in stock, giving the Superintendent the additional discretion of reducing the book-rate in cases in which he may consider it necessary to ensure a sale, the loss being debited to "Profit and Loss."

23. The articles in Class C reported as quite unserviceable, and kept on the books without value, the Committee recommend should be sold by auction at an early date. The Committee also recommend that the Superintendent be ordered to submit a full report of the result of the experiment before the close of the official year 1881-82. It is further recommended that no further stores of any description should be purchased or indented for without estimates for the same being submitted and sanctioned under the rules applicable to Original Works.

24. CONSULTING ARCHITECT DIVISION.—On the 30th September 1880 the balance at debit of stock was Rs. 46,465-2-1, of which Rs. 42,743-7-11 is charged on account of manufacture and carriage. The difference between these two figures (Rs. 3,721-10-2) represents value of articles on hand, which the Consulting Architect states will be required for works in progress. The large sum of Rs. 42,743, however, is thus accounted for by the Consulting Architect:—

	RS.
Value of patent pottery kiln	26,454
Do. of sheds	5,388
Do. of land	3,589
Stock actually on ground	4,271
Do. issued but not charged	3,041
Total ...	42,743

It is reported that the actual debit to the kiln will be reduced at the end of the year to Rs. 24,000, but that the whole sum on account of the brickfield remaining unadjusted will come up to Rs. 33,000. The kiln was constructed in the year 1873, and had the proper procedure of charging a fair percentage to all outturn and crediting it to the brickfield been followed, this large sum would not have remained to be adjusted at this late period.

Mr. Chisholm states that with General Walker's concurrence in 1875 a sum of Rs. 20,000 was entered in the estimates for the Post Office and Telegraph Office as a fair sum to charge off in return for the benefit those buildings would derive from the kiln. From the accounts it appears that nothing has yet been charged.

Under these circumstances, the Committee consider that, as it would not repay the labor that would be necessary to go back upon the accounts of past years to enable the Consulting Architect to charge off the correct percentage rate to all the issues, it may, as a special case, be considered permissible to charge off the lump sum of Rs. 20,000 as originally proposed, the Consulting Architect being given to understand that he will be held personally responsible that he does not again allow such an accumulation of debits to arise without making the necessary adjustments month by month to the credit of his manufacture account.

25. WEST COAST.—The stock balance of the division on the 30th September 1880 was Rs. 13,656, of which Rs. 1,466 is for "manufacture and carriage." The Executive Engineer proposes to sell the lime kilns with sheds at Wellington and Ootacamund, and also stock to the value of about Rs. 2,300. The remainder to be retained, as being likely to be required for works within the next 18 months.

The kilns should before now have been written off the books by debit to the works for which they were originally constructed. The accounts of these have long since been closed, and as the Executive Engineer reports that the kilns are practically useless, the Committee recommend that if a purchaser can be found, they may be sold and the loss debited to Profit and Loss. In any case the kilns should be written off the stock accounts.

On the stock he proposes to sell the Executive Engineer estimates the loss will be about Rs. 1,050, which he proposes to distribute as follows:—

	RS.
I. By debit to Works	112
II. By debit to Works and Profit and Loss	362
III. By debit to Profit and Loss	582

As the articles enumerated under Classes I and II will be required for works, the Committee are of opinion that the whole value should be charged off to these works, provision being made in the estimates for the exceptionally high charges by entering slightly increased rates.

As it appears that the articles in Class III will not probably be required for works, the Committee recommend that they may be disposed of as the Executive Engineer proposes and the loss debited to Profit and Loss.

The articles as per margin the Executive Engineer considers may be useful to the Local Fund Boards; they should therefore be offered to them, the Executive Engineer being left discretionary power to accept a lower sum than the book value, should he consider it for the interest of Government.

	Book Value. Rs. A. P.
211½ Patent Fuze Coils	105 12 0
243 Do.	128 10 0
7 Iron Plates	88 8 11

26. The stock expenditure during the period from October 1879 to 30th September 1880 is shown to be Rs. 5,544, chiefly under "Building Materials" and "Miscellaneous."

Most of the articles under these heads can be obtained when necessary for works after they are sanctioned; the Committee therefore are of opinion that the limit for reserve stock should not be fixed at a higher sum than Rs. 2,000, as that limit should amply suffice to admit of any stock being kept which it is known cannot be obtained within a reasonable time, and which it is considered should be retained as being likely to be required for emergencies.

Every endeavour should be made to reduce the stock balance to this limit, and lower if possible.

27. PRESIDENCY PUBLIC WORKS WORKSHOPS.—The Superintendent submits a list of stock belonging to the Workshops, the total book value of which is Rs. 1,43,513. He proposes the transfer to the Public Works Stores of articles to the value of Rs. 1,00,851-6-4, with a view to their sale eventually, and to the immediate relief to the Workshops of the interest charges. Rs. 33,540 worth of stock he proposes to retain, and other articles valued at Rs. 9,121-0-1 he suggests should be sold by auction. Of the articles proposed for transfer to the Stores the Committee are of opinion that those as per margin should be sold and not retained, as being likely to realize more now than if kept for an indefinite period. The principle involved in the transfer of manufactured goods and other stores from the Workshops to the Public Works Stores should not, the Committee are of opinion, be as a rule permitted, inasmuch as it would tend to encourge over-manufacture of articles not immediately required in seasons when the shops are short of work, so as to keep them going and possibly make them appear to be profitable when the reverse is the case. As the object of the present proposals is, once for all, to endeavour to place the Workshops on a satisfactory footing by relieving them of all charges not properly belonging to them, the Committee recommend that the transfer of the remaining articles, valued at Rs. 96,734, to the Public Works Stores may, as a very special case, be sanctioned, the same steps being taken for their early disposal as have been recommended for the other Public Works Stores.

	Rs. A. P.
94 Wheel barrows valued at	1,598 0 0
11 Wall brackets	104 8 0
1 Tent	185 0 0
3 Trestle cots	90 0 0
5 Copying presses	236 4 0
7 Iron camp cots	132 3 9
Vulcanized Indian Rubber	1,881 0 9
Total ..	4,127 0 6

28. The articles proposed by the Superintendent to be retained, as being likely to be used within the next 18 months, consists chiefly of metals, fuel, tools, &c.; these retention may therefore be sanctioned, as may also, in the opinion of the Committee, the proposals in regard to the auction of stock valued at Rs. 9,121. No purchases of fresh stock should, however, be allowed, and materials required should be obtained on indent from the stores for specified jobs.

29. The Superintendent represents that the value at which the machinery stands on the books is considerably in excess of the real value, and gives a comparative statement showing the book value and that at which he estimates the present value of each machine, the totals being as per margin. The difference, Rs. 19,546, he wishes to be written off to Profit and Loss account.

	Rs.
Total book value	86,759
Superintendent's estimate	67,213
Difference	19,546

G.O., No. 668, dated 7th March 1871.

Depreciation of machinery has been, since the year 1870-71, charged off at 2 per cent. under the marginally-noted orders.

It appears to the Committee that this is too small a percentage to deduct, as it is improbable that the machines will be effectively used for the number of years represented by that small depreciation percentage. It is natural that those responsible for the Workshops should desire low depreciation charges, as thereby fewer calls are made upon the gross receipts before the net profit is brought out, and hence the revenue is made to appear as great as possible; but it appears an unsafe procedure to admit, for the real facts will eventually force attention and compel a large write off at some future date.

This has been in a measure proved by the past history of the Workshops, and it would appear that 5 per cent. would be a more reasonable percentage charge to fix for depreciation charges, including cost of repairs on account of machinery. Prior to the year 1870-71 the charge for depreciation was written off at 10 per cent. The accounts show that since 1872-73, besides the depreciation charges, heavy and increasing amounts have been spent for repairs, and these have

been debited to "General Charges," and do not appear against "Machinery." The table given below shows, year by year for the last ten years, the amounts which have been written off on account of depreciation and the charges for repairs to machinery. The amount of depreciation charges as they would have been at 5 per cent. and the value of work outturned by the Workshops are also entered for comparison. It further appears that the Workshops machinery was re-valued by Mr. Grainger in the year 1877-78, and the difference, viz., Rs. 26,574, between the then book value and the estimated value was written off. Reviewing the above facts, the results appear briefly to be as follows:—

—	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Total.
Depreciation charge written off.	10 per cent. 6,011	10 per cent. 5,832	10 per cent. 5,269	2 per cent. 997	979	1,573	1,542	1,536	1,505	1,475	1,501	1,577	1,800	31,597
Repairing charges.	..	..	..	..	..	750	..	2,203	600	695	2,577	12,101	5,863	*24,789
Total, Depreciation and Repairing.	..	..	..	..	..	..	..	..	..	..	..	..	..	56,386
Depreciation as it would have been at 5 per cent.	3,005	2,716	2,635	2,492	2,447	3,933	3,854	3,845	3,763	3,688	3,752	3,943	4,500	44,573
Excess over 5 per cent.	..	..	..	..	..	..	..	..	..	..	..	..	..	11,813
Value of work outturned in Workshop.	..	..	..	94,815	1,11,195	1,35,650	1,80,585	2,08,645	2,32,326	4,44,308	5,73,476	2,58,200	2,16,876	..

* Does not include Item No. 2 of Profit and Loss account, materials on account of repairs to tools, machinery, shops and petty working charges.

	Rs.
Original cost of machinery	60,115
Additions since made	92,186
Add repairs to do.	24,789
(Debited to general charges instead of to Tools and Plant, see Table G.)	
Total cost of machinery ...	1,77,090
Depreciation charges written off	31,597
Amount written off on Mr. Grainger's report	26,574
Value sold	524
	58,695
Balance	1,18,395

Had the 5 per cent. depreciation charge ruled during the whole time, the deductions would have been as follows:—

	Rs.
Depreciation charges written off	44,573
Write off on Mr. Grainger's report 26,574	
Less 5,659	
	20,915
Value sold	524
	66,012

and the balance value of the machinery would have been Rs. 1,11,078 instead of Rs. 1,18,395; the Committee would therefore recommend the write off against Government of the difference, viz., Rs. 7,317, instead of Rs. 19,546 as suggested by the Superintendent of Workshops.

30. The Superintendent further proposes a reduction of the debit to Capital on account of "Block" by revaluation of the buildings, or by a larger share of the charge thereof being transferred to stores.

The workshops utilize the greater part of the buildings, hence the transfer to stores of a large proportion of the charge for them appears to the Committee inadmissible; and in regard to the revaluation it has to be borne in mind that the original arrangements were made, estimated for and carried out by Mr. Grainger, and that additions have since been made which should not have been the case if the premises were already too extensive; any relief therefore under this head cannot, the Committee think, be justly recommended.

31. In order to make the workshops pay it appears that more than a relief from charges on account of interest and depreciation is necessary, and is to be attained only by the most careful scrutiny of all the arrangements and check over unnecessary expenditure, more especially in connection with the general expenses consisting of general departmental supervision, office establishment, labor and material on general account, and repairs to machinery. The charges for general departmental supervision are as follow:—

1.—Moiety of pay and allowances of the General Superintendent.

2. Full pay and allowances of the Sub-Engineer.

The total of both amounting to Rs. 710 per mensem.

3. The additional establishment detailed below, of which particulars are given for the last ten years.

Statement showing the state of Departmental Supervision for ten years.

—	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	Remarks.
1 Smith Maistry.	40	40	40	40	40	40	50	50	35	45	
1 Do. ..	..	..	..	..	..	..	..	..	35	35	Superfluous.
1 Carpenters' Foreman.	..	..	..	..	..	..	60	60	80	80	Superfluous.
1 Do. Maistry.	Day 1 A. 30	12	12	1 RS.	Month 30	30	35	35	35	35	
1 Turner Maistry.	30	30	30	30	35	35	40	40	40	40	
1 Do. do.	..	..	..	..	..	..	..	..	30	30	Superfluous
1 Filer Maistry	..	..	..	..	..	30	35	35	35	30	
1 Do. ..	..	..	..	..	..	..	..	..	30	30	Superfluous
Total, work turned out.	111,195	135,650	180,585	208,645	232,326	444,308	573,476	258,201	216,876		

From this table it will be seen that there has been a most marked increase in the cost of this portion of the establishment, especially during the last two years, which a comparison with the work outturned does not appear to justify. The numbers and rates of pay of some of the men employed during this latter period are greater than in the years 1876-77 and 1877-78, in which the outturn of work was more than double, and which, moreover, were famine years.

The additional men noted in the remark column of the table appear to the Committee superfluous; under "Office Establishment," besides the regularly sanctioned establishment, there is a contingent establishment of clerks, conocopilays, attenders, and boys appointed by the Superintendent. The particulars of this contingent establishment are given below for the last ten years, and it will be seen that here also there has been an increase in the numbers and rates of pay of this establishment during the last two years. The Committee consider that no establishment should be entertained except under the Public Works ordinary rules, and men otherwise engaged for special jobs should be debited to those jobs as work establishment and not to general charges. Looking at the figures given, nearly as much work was turned out in the year 1873-74 when there was no such contingent establishment; its continuance therefore appears to the Committee to be unnecessary.

Contingent Establishment.

—	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	Remarks.
					Day.				RS. A. P.	RS. A. P.	
Smith's Conocopilay.	..	..	..	..	0 5 0	0 7 0	0 10 0	0 10 0	15 0 0	15 0 0	
Filer and Turner do.	..	..	..	..	..	0 5 0	0 7 0	0 7 0	15 0 0	Day. 0 6 0	
Foundry do. ..	..	..	..	..	..	0 5 0	0 8 0	0 10 0	15 0 0	15 0 0	Unnecessary, the work being let on contract.
Carpenter do. ..	..	..	..	..	0 7 0	0 8 0	RS. 20 0 0	20 0 0	20 0 0	20 0 0	
One Clerk ..	..	..	..	..	..	..	15 0 0	15 0 0	25 0 0	25 0 0	
Do. ..	..	..	..	..	..	..	25 0 0	25 0 0	25 0 0	25 0 0	
Do. ..	..	..	..	15 0 0	15 0 0	15 0 0	15 0 0	15 0 0	17 8 0	17 8 0	
Do. ..	..	..	..	15 0 0	15 0 0	15 0 0	15 0 0	17 8 0	17 8 0	17 8 0	
Do. ..	..	..	..	..	..	..	0 6 6	0 6 6	0 6 6	0 6 0	
Moochee ..	..	..	..	..	..	..	3 0 0	3 0 0	3 0 0	3 0 0	Besides these there are also coolies attending to office work.
Attenders, three, at 6 and 8 As.	..	..	..	..	..	..	..	..	4 0 0	4 0 0	
Boys, four, at 3 As.	..	..	..	..	..	..	..	..			

32. In addition to the above there are charges for labor and materials for general purposes, over which the Superintendent alone can exercise an efficient check; but the Committee consider that it should be distinctly understood that there should be no such charges to this head of items which can properly be charged to the jobs in hand. After jobs have been completed and debited with the charges for labor and materials, and a "percentage for general charges," there is an additional charge for "extra profit." This does not appear to the Committee a correct or politic charge, the object being to make the workshops pay, the charges should not be more than is necessary to attain this object. If the general percentage charge is insufficient, it should be increased instead of an entirely fresh charge being made under the name of "extra profit."

33. The balance at debit of raw materials and manufactured goods is charged with interest; it should therefore be kept as low as possible, and this the Committee consider can be attained by the workshops only manufacturing upon definite orders, and obtaining materials from the Public Works Stores on indent for each order as required: even if the measures above adverted to are sanctioned, the Committee are of opinion that the results will not show a profit, unless the general charges and the management of the shops receive the greatest attention. With this view they consider that more detailed information regarding the transactions from month to month is necessary. At present all that is reported monthly is the amounts received by the workshops and the amounts repaid by it to Government; of the intermediate transactions, on the proper management of which so much depends, nothing is known in the Examiner's Office or by Government.

Past experience shows that the following restrictions are necessary:—

I.—No work to be executed except upon regularly sanctioned estimates: with half the estimated amounts paid in advance when the work is ordered by private individuals or the general public.

II.—No additions or repairs to block or machinery to be undertaken except on estimates regularly sanctioned under Public Works Department original works rules, the Superintendent having the powers of an Executive Engineer within the limits as to total funds, to be fixed from year to year by Government. In the event of no funds being allotted, of course no sanctions could be given.

III.—No establishment other than work establishment to be entertained except under the usual Public Works Department establishment rules.

IV.—The purchases of stores or materials of any kind should not be permitted, but all such should be obtained from the Public Works Stores on indent, specifying the particular job for which they are wanted and to which the whole should be charged.

In order to afford the means of ensuring that these points receive attention, the accompanying schedules (marked A to F) should accompany the accounts.

As the journal and ledger are closed every month, there will be no difficulty in abstracting this information; and the remaining operations necessary to arrive at the general profit and loss account, which brings out the results of the transactions, can be effected in the Examiner's Office.

Dr. A. Cr.

Stock Account Current.

	RS.		RS.
To Balance	...	By Issue to Mechanical Department.	...
Value received from Public Works Stores	...	Do. Instrument do.	...
Value received from Commissariat Department	...	Do. General do.	...
		Do. Foundry do.	...
		Balance ...	...
Total ...	...	Total ...	...

B.

Dr. Account of Adjustment. Cr.

	RS.		RS.
To work done by arsenal	...	By debit to Mechanical Department.	...
		General charges	...
Total ...	...	Total ...	...

C.

Detail Statement of General Charges for the month of .

Particulars.	Cash.	Stock.	Adjustment.	Remarks.
	RS.	RS.	RS.	
General supervision	...	...	...	
Office establishment	...	...	...	
Engine Driver	...	...	...	
Fireman	...	...	...	
Coolies	...	...	...	
Coal	...	...	...	
Charcoal	...	...	...	For the engine in Mechanical Department.
Other materials	...	...	...	
Work done by other Department.	...	...	...	
Total ...	...	...	...	

D.

Statement of Debits and Credits to the Items making up the Capital of the Workshop for the month of .

Particulars.	Balance at the end of last Month.	Debits during the Month.	Total.	Credits during the Month.	Balance at the end of Month.	Remarks.
Block	...	...	...	...	...	
Machinery	...	...	...	...	...	
Raw materials	...	...	...	...	...	
Manufacture	...	...	...	...	...	
Mechanical Department ...	...	...	...	...	...	
Instrument do. ...	...	...	...	...	...	
Foundry	...	...	...	...	...	
Public Department	...	...	...	...	...	
Sales	...	...	...	...	...	
Cash	...	...	...	...	...	

E.

Statement of Percentages charged up to .

Department.	Amount.	Remarks.
	RS.	
Mechanical Department	...	
Instrument do.	...	
Foundry	...	
Raw materials		

F.

Dr. Statement of surrender and demands up to the month of . Cr.

	RS.		RS.
To Cash paid into Treasury	...	By Letters of Credit	...
Adjustment by transfer	...	Stores received from Public Department	...
		Interest on Capital	...
		Leave and Pension allowances.	...
		Net Profit	...
		Decrease of Capital	...
Total ...	...	Total ...	...

34. BUCKINGHAM CANAL.—The Superintendent of Works was desired by the Government to reconsider his proposal to bring materials valued at Rs. 11,436 on the Stock Account, and he states in his letter to the Committee of the 4th December that the Government have sanctioned the retention of materials to the value of Rs. 9,375, the remainder to be disposed of by sale.

The Superintendent of Works has informed the Committee that he has six small boats and two spoil boats that are unfit for further use; that he has scientific instruments in excess of normal requirements but that are wanted at present by survey parties, and that there are surplus tools, viz., 1,279 pickaxes, 476 crowbars, 8,803 mamooties, and sundry other minor items, as also some furniture which are available for transfer or sale.

The Committee recommend that the eight unserviceable boats be sold off, and are of opinion that the Superintendent of Works should return the tools he does not require to the Public Works Stores for disposal and sell off the surplus furniture. The value of the boats has been already charged to the works, and the sale proceeds will be credited in the canal accounts; otherwise the Superintendent shows in his returns that he has no stock on hand.

35. GAS WORKS, FORT ST. GEORGE.—The Superintendent states that the greater part of the materials on his list,* dated the 4th March last, are required for the present gas works, but that there are a good many brass materials under the last head in the list that are old and useless; these are marked *c*.

* Enclosed.

There is also a large quantity of stores that have been in the charge of the Public Works Department, and of the articles entered in the other list,† dated the 28th October 1880, a few only marked *a* and *b* are wanted for the present gas works. The remaining large proportion of the stores is not likely to be used, unless the extension of the gas works be sanctioned, in which event all the articles marked *c* would be required.

† Enclosed.

Doctor Rogers considers that these latter stores marked *c* would be sold locally at a great loss, and he believes it would be worthwhile to send the brass fittings, &c., to England, if they are not to be kept. The Committee recommend that the Superintendent of the Gas Works be authorised to sell off the unserviceable articles marked *c* on his list of the 4th March 1880.

The whole of the gas works stores have been charged to the works and none are brought on to stock account.

36. The Committee are unable to judge whether the extension of the gas works is likely to be carried out, or if the stores marked *c* on the list of 28th October are to be considered as surplus and an incumbrance. These stores are kept by the Superintendent of Works, who says they do not in reality give him any trouble, as they are locked up in a separate store room.

While then there is no urgency in the matter, the Committee think that if the gas materials are not to be brought into use soon, it will hardly be expedient to send the brass and glass fittings, the tubes, pipes, &c., back to Europe, but that all should be cleared out by auction sale. The original list of gas stores shows that they were sent from the Tharrow Field Iron Works at Glasgow, and as the list is dated the 1st June 1869, there is little prospect of a remunerative price being given if the stores were taken back.

37. PIER STORES.—The Master Attendant proposes to use up the old pier stores lying in the fort in constructing jetties for boats within the harbour. These stores may be turned to account at any time, and the Committee recommend that they may be held at the disposal of the Master Attendant.

List of Gas Materials remaining under the charge of the Superintendent of the Government Gas Works on the 25th February 1880.

	Quantity.	Description of Articles.	Remarks.
	10	Common round shades, large	Good.
	1	Flowered do.	Do.
	38	Frosted do.	Do.
	2	Chamber shades, small	Do.
	2	Frosted chamber shades	Do.
	29	Chimneys	Do.
	6	Punkah or shade tops	Do.
	1	Lantern covered on three sides with an oval glass and with tin cover and chimney on the back.	Moderate.
	1	Spare oval glass for the above lantern	Good.
	1	New gas lantern made of brass for muster	Do.
	10	Lanterns for oil light	Do.
	About 600	Feet of composition pipes of ½ inch in diameter	Moderate.
	About 49	Feet of do. of ¼ inch in diameter with ten side lights attached.	Good and new.
	5 feet.	¼ Inch composition pipes in three pieces	Good.
	12 ,,	½ Inch do. in three pieces	Old.
	10 ,,	½ Inch do. in two pieces	Old.
	3 ,,	1 Inch leaden pipes with a stop cock attached	Old.
	2½ ,,	1¼ Inch do. do.	Old.
	1	Leaden flange with four holes	Old.
a	1	Glass flower-case	Old.
	1	20 lights metre	Good.
	1	Large old metre	Do.
	1	Photometer, complete	Old and rotten.
	6	Brass screws for the above metre	Good and new.
	2	Jets of the above	Do.
	1	Box containing scales and weights and 1 thermometer	Do.
	3½	Dozen jets	Do.
	1	Argand burner	Do.
	1	Wooden ladder, small	New.
		Brass Materials.	Good.
	40	Wall brackets, bronzed	
	2	1 Inch stop cocks for the use of main pipes	Good, 3 useless.
	10	1 Inch do. for the use of service pipes	New and good.
	3	1 Inch stop cocks for the use of leaden pipes	New.
	6	Wall brackets with pieces of wrought iron pipes attached.	Old.
	9	Chimney holders	Old.
	2	Side lights of theatre room	Good.
	17	1¼ Inch brass unions for iron pipes	Old.
	2	1 Inch do. iron and lead	New and good.
	1	1¼ Inch do. do.	Do.
	30	⅜ and ¼ inch do. do.	Do.
	35	½ and ¼ inch do. leaden pipes only	Good.
	34	½ Inch brass tees for the use of iron pipes	Do.
	17	⅜ Inch do. do. of leaden pipes	Do.
	27	¼ Inch do. do. of do.	Do.

List of Gas Materials remaining under the charge of the Superintendent, &c.—*cont.*

	Quantity.	Description of Articles.	Remarks.
		Brass Materials—cont.	
	48	Brass elbows	Twenty-three quite new and 25 good.
	15	Argand burners for chimneys	Good.
	22	Do. for shades	Do.
	117	Brass galleries or shade holders	Do.
	1	Eight lights star with jets attached	Do.
	2	Brass gilt pendants of sorts	New and good.
	1	Handsome bracket, bronzed	Good.
	1	Brass blow-pipe	Do.
	9	Jets of different sorts	Do.
	3	Brass pipes of small size	Do.
	1	Iron pipe with a funnel and brass stop cock attached	Moderate.
	1	Eight-sided light	Old.
	1	Light in the form of A	Old.
	1	Do. do. of V	Old.
		Iron Materials.	
	2	Furnace frames	Good.
	1	Do. door	Do.
	1	Lid of the retort	Do.
	14	Ash-pans of the furnace	Do.
	1	Key for the lid of the retort	Do.
	6	Trays for small lime purifiers	Do.
	1	Pickaxe	Do.
	2	Tongs	Do.
	2	Iron frames for the mouth piece of the retort	Do.
	About 130	Feet of wrought iron pipes of 1 inch	Do.
	5	Syphon boxes	Do.
	1	Collar of cast iron pipe, 4 inches in diameter	Do.
a	2	Lamp posts of the reading room, of wood	Old.
	2	Do. of wrought iron pipes	Old.
	6	Long pendants of 7 feet each	Good.
	26	Iron tees of 1 inch	Moderate.
	9	Elbows	Do.
	4	Caps	Do.
	105	1 Inch iron couplets	Moderate.
	6	Iron hooks for hanging lanterns	Good.
	5	Keys for turning valves, &c.	Do.
	3	4 Inch pipes of 3 feet with a branch cast in it	Do.
	3	Mouth pieces	Do.
	1	Retort cost 94 rupees 11 annas	Do.
		One packed dealwood box containing the following articles :—	
	2	Large round shades	New and good.
	2	Small do.	Do.
	2	Large shade covers	Do.
	2	Small do.	Do.
	2	Large shade holders	Do.
	1	1 Inch brass stop cock	Do.
	1	Large brass ceiling plate	Do.
	2	Small brass unions	Do.
	1	½ Inch stop cock	Do.
	1	Stop cock for iron and lead	Do.
	1	Do. leaden tubes	Do.
	1	Do. elbow everything complete	Do.
	1	Double bracket	Do.
	1	Single do. with a shade holder	Do.
	3	Packs containing 23 dozen jets	Do.
	1	Pack do. 5 crutches	Do.
	1	Packed dealwood box full of iron pipes	Do.

List of Gas Materials remaining under the charge of the Superintendent, &c.—*cont.*

	Quantity.	Description of Articles.			Remarks.
		Coals.			
a	...	* Cannel coal remaining on the 25th February 1880 is about	TONS. 311	£. 1,830	Per ton. RS. A. P. 33 6 11
	...	Common coal remaining on the 25th February 1880	7	2,202	Per ton. RS. A. P. 26 8 0
		Old and rotten materials, Brass materials.			
	12	Frosted round shades			Broken.
	3	Brass sundries			Old and rotten.
	3	1 Inch brass stop cocks			Do.
	5	1 Inch do. do. plugs			Do.
	17	Ceiling plates of sort			Do.
	21	Plugs of the stop cocks of old pendants and side lights.			Old and broken.
	12	Stop cocks of the old pendants			Old and rotten.
	32	Elbows			Do.
	7	Side lights			Do.
	2	¾ Inch brass stop cocks			Do.
	6	Locks, old, of the boxes in barracks			Do.
	3	Brass hinges			Do.
	1	Do. wheel			Do.
	1	¾ Inch to ½ inch stop cock			Do.
	1	Copper measure with a stop cock			Do.
c	1	Iron frame and door			Do.
	30	Old pendants			Do.
	2	Outlet valves, old			Do.
	2	Pulleys, old			Do.
	1	Portable forge			Do.
	1	Water gas retort			Do.
	1	Furnace for melting lead			Do.
	1	Hydraulic main of oil gas			Do.
	2	Oil gas measures or retorts			Do.
	4	Lids of the retort			Do.
	6	Ash-pans			Old and rotten.
	About 50	Feet of chains			Do.
	About 30	Do. of wrought iron pipes			Do.
	4	Iron rollers			Do.
	3	Iron bars			Do.
	1	4-inch pipe, 6 feet long			Do.
	3	Round hammers			Do.
	6	Keys of oil gas retorts			Three broken.
a.	11	Iron dies			Old.
c.	6	Retorts, unserviceable			Moderate.
a.	68	Feet of thick coir ropes			Rotten.
	38	Do. of do. hemp ropes			Old.
c.	2	Tin cisterns			Old.
		Several sundries of iron pipe, bolts, nuts, rods, &c., weighing about 3 or 4 maunds.			Old and rotten. All corroded and useless.

* Note dated 7th December 1880, this amount was arrived at by calculation merely.—T.K.R.

MADRAS,
4th March 1880.

(Signed) T. K. ROGERS, M.B., F.R.C.S.,
Chemical Exr. & Supt., Gas Works.

Gas Work Materials under charge of the Public Works Department.

Name of Material.						
Stock and dies, ¼ and ⅝ inch	Set	1	*a.*
Do. ⅜ and 1 ,, ...	,,	1	
Do. ¼ × ⅝ for brass-work	,,	1	
Rymers 2, 1½, 1¼ inch	,,	1	

Gas Work Materials under charge of the Public Works Department—*cont.*

Name of Materials.				
Tube lure	No.	1		
Pliers, gas-fitters...	,,	6		
Augers, worm	,,	4		
Pipe-cutter, large	,,	1		
Cast steel yarming tools	,,	1		
Spanners for cocks	,,	7	*a*	
Do. back nuts	,,	8		
Pipe tongs, ¾, 2, 2¼ inch	,,	1		
Plug	,,	7		
Hand hammer	,,	1		
Fire clay retorts	,,	6		
Cast iron oval retorts	,,	4		
Do. at bottom	,,	4		
Do. mouth pieces	,,	1	*c*	
Do. mouth covering plate	,,	13		
Do. do.	,,	13		
Do. 3-inch way pipe box	,,	1		
Do. socket pipes, 9 feet long, 3 inch diameter ...	,,	16	*a*	
Do. do. 9 do. 4 do. ...	,,	29		
Do. bend, 4 inches diameter	,,	6	*c*	
Do. pipe, 6 feet long, 1½ inches diameter ...	,,	566		
Do. do. 4 do. 1 do.	,,	2,528		
Iron chain, 22 do.	,,	6	*a*	
Iron hooks, large	,,	6		
Do. do.	,,	5		
Do. do.	,,	7	*c*	
Do. do.	,,	3		
Iron handles	,,	1		
Iron jumper	R. ft.	12		
Lead tube, 2 inch	,,	27		
Do. 1½ ,, ...	,,	68	*c*	
Do. 1 ,, ...	,,	24		
Do. ¾ ,, ...	,,	240		
Do. ½ ,, ...	,,	120	*a*	
Do. ⅝ ,, ...	,,	1		
Brass main cocks, 2 inch	,,	76	*b* 25	
Do. do. 1½ ,, ...	,,	18	*a*	
Do. do. 1 ,, ...	,,	10	*b* 2 new.	
Do. do. ¾ ,, ...	,,	109	*b* 50	
Do. do. ⅝ ,, ...	,,	534	*b* 200	
Do. do. ½ ,, ...	,,	10	*a*	
Do. do. ⅜ ,, ...	,,	15	*b* 5 new.	
Do. do. 1 ,, ...	,,	2		
Union for iron and tin, 2 inch	,,	10		
Do. do. 1½ ,, ...	,,	2	*c*	
Do. do. 1 ,, ...	,,	68		
Ceiling plate, ½ ,, ...	,,	336		
Do. ⅝ ,, ...	,,	545	*b* 200	
Elbow cocks and galleries, ¾ inch	,,	328	*b* 200	
Do. drop screws, ¾ inch	,,	110		
Do. do. ⅝ ,, ...	,,	14	*c*	
Do. do. ½ ,, ...	,,	2		
Do. do. 1 ,, ...	,,	83	*b* 40	
Do. do. for tin, ½ inch	,,	21		
Brass lever for socket	,,	145	*c*	
Lever lantern cocks	No.	2	*a*	
Copper syphon pumper	,,	4	*b* 2	
Water gauges with glass tube	,,	7		
1½-inch cocks, brass plug	,,	1	1 *c*	
1 do. do.	,,	15	*a*	
India-rubber bags for mains	,,	1		
Wet meter, 80 lights	,,	1		
Do. 10 do.	,,	2	*c*	
Bodies for 15 set pendants	,,	2		
Drop for do. 16 feet long	,,			

Gas Work Materials under charge of the Public Works Department—*cont.*

Name of Materials.			
Bodies for 4 set	No.	4	
Do. for 3 set	"	2	
Double brackets, two lights	"	2	
Do. joint bracks	"	3	
Bodies for pendants, 6 set	"	4	
Drop tubes, 2 inch 16 feet long and bodies	"	2	*c*
27 do. and do. 2 "	"	3	
16 do. and do. 3 "	"	1	
7 do. and do. 4 feet	"	2	
13 do. and do. 6 "	"	1	
Pan head revets, $\frac{1}{2}$ and $\frac{1}{4}$ inch	"	1	
Snap head revets, $\frac{7}{16}$ and $\frac{1}{4}$ "	"	3,074	*a* burners.
Side glass	"	3,252	*a*
Top glass	"	1,102	
Bottom glass	"	2,211	
Clear glass globes, 8 inch	"	403	
Cut do. 8 "	"	1,859	
Large glass chimneys, 3 boxes	"	457	
Punkah tops with wire gauge bottoms, 5 boxes	"	136	*c*
W. I. pendants, $3\frac{3}{4}$ long $\frac{1}{2}$ diameter	"	800	
Do. tubes with coupling 1 inch diameter, $1\frac{3}{4}$ feet long.	"	70	
Do. do. $1\frac{1}{2}$ do.	"	36	
Do. do. $1\frac{1}{2}$ inch diameter $1\frac{3}{4}$ do.	"	8	
Do. do. $1\frac{1}{2}$ inch do. $1\frac{1}{2}$ do.	"	103	
W. I. tubes with coupling 1 ft. diameter, $\frac{1}{2}$ ft. long	"	30	
Do. bend $1\frac{1}{2}$ inch do.	"	5	
Do. do. 1 " do.	"	67	
Do. do. $\frac{1}{2}$ " do.	"	16	*c*
Do. tubes for lamp tops, $1\frac{1}{3}$ feet long, $\frac{3}{4}$ inch diameter.	"	5	
Do. pendants	"	504	
Do. rod, $6\frac{1}{2}$ feet long, $\frac{3}{4}$ inch	"	485	*b* 150
Do. carrying bars for retorts	"	2	*c*
Do. charging scoops for retorts	"	2	
Do. do. do small	"	1	*a*
Do. C. I. 2-inch flange bend pipe	"	1	
Do. do. 3 feet long, 1 inch pipe fitted with plug $\frac{3}{8}$ inch.	"	4	
Do. do. flange and spigot pipes, $1\frac{1}{4}$ feet long, $1\frac{1}{2}$ inch diameter.	"	28	
Do. do. do. $\frac{7}{8}$-inch diameter	"	6	*c*
Do. 3-inch valve with handle	"	1	
Do. 2 do. do.	"	3	*a*
C. I. bends, $1\frac{1}{2}$ inch	"	1	
Do. do. $1\frac{1}{4}$ "	"	1	
Do. pipe 3 " $\curlyvee$ $1\frac{1}{2}$ inch	"	6	*c*
Do. demy pipes	"	1	
Loose sockets	"	86	
Flange sockets valve	"	48	*b* all of 4 inch wanted.
C. I. 12-inch street syphon boxes	"	14	
Do. 10 " do.	"	5	
Do. 8 " do.	"	5	
Do. scrubbers sieves, pieces	"	1	
Do. iron sieves, oxide purifier	"	11	
Do. elbow connection bend, 1 inch	"	12	
Do. do. $1\frac{1}{2}$ "	"	47	
Do. syphon traps and covers	"	72	
Do. elbow carrior for brackets	"	39	*c*
Do. lamp brackets	"	140	
Do. bundles of flat backs for brackets	"	96	
Belly pipes, each 3 feet long with sockets at both ends and stopped for $1\frac{1}{2}$ serivices and fitted with plug.	"	36	
Fire bars	"	15	
C. I. 14-inch lamp tops	"	30	
Do. do. do.	"	61	
	"	106	

Gas Work Materials under charge of the Public Works Department—*cont.*

Name of Materials.			
C. I. shell castings for lamp	No.	63	
Do. iron tops for lamp	"	123	
Solder bolts for brackets	"	29	
Bottom for lamps	"	141	
Rods	"	51	
Knobs	"	148	
W. I. elbow, 1, $\frac{1}{2}$, inch	"	98	
Do. tees, 1, $\frac{3}{4}$, 1 inch	"	45	
Do. do. $1\frac{1}{4}$, $\frac{1}{2}$, $1\frac{1}{4}$ "	"	130	
Do. do. 1, $\frac{1}{2}$, 1 "	"	66	
Do. do. $1\frac{1}{4}$, 1, $1\frac{1}{4}$ "	"	37	
Do. do. $1\frac{1}{4}$, $\frac{3}{4}$, $1\frac{1}{4}$ "	"	21	*c*
Do. do. $1\frac{1}{4}$, $\frac{3}{4}$, 1 "	"	9	
Do. do. $1\frac{1}{4}$, $\frac{1}{2}$, 1 "	"	13	
Do. do. 2, $\frac{1}{2}$, 1 "	"	3	
Do. do. 2, 1, 1 "	"	5	
Do. elbow 2, 2 inch	"	16	
Do. do. 1, $\frac{3}{4}$ "	"	27	
Do. tees 1, 2 1 inch	"	53	
Do. do. 2, 2, 1 "	"	10	
Do. do 2, $\frac{1}{2}$, 2 "	"	30	
Do. do. $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ "	"	33	
W. I. crosses, $\frac{1}{2}$, $\frac{3}{4}$, 1 inch	"	12	*c*
Diminishing coupling, 2, $1\frac{1}{4}$ inch	"	1	
Do. do. $1\frac{1}{4}$, 1 "	"	5	*a*
$\frac{3}{4}$-inch tubes with couples 5 inches long	"	21	
Do. crosses, $1\frac{1}{4}$ inch	"	76	
Do. couplings, 1 inch	"	64	
Do. do. $\frac{3}{4}$ "	"	8	
Do. 2-inch tube ring nut	"	12	*c*
Do. $\frac{3}{4}$ " to $\frac{1}{2}$ inch	"	29	
Do. screw nails, 6 inches long	"	80	
Do. bolts, 6 inches × $\frac{3}{4}$ inch	"	6	
Do. bends, $\frac{3}{4}$ inch to $\frac{3}{8}$ "	"	6	
Do. gas hooks	"	2,470	*b* all of small size wanted.
Do. washers	"	642	
C. I. lamp washers	"	53	
Screws, $1\frac{1}{2}$ inch × $\frac{1}{2}$ inch	"	360	
Roofing rivets, galvanized	"	756	
Rings, do.	"	405	*c*
Snap head rivets, 1 inch × $\frac{1}{4}$ inch	"	723	
Do. $1\frac{1}{2}$ inch × $\frac{1}{4}$ inch	"	230	
Do. $\frac{3}{4}$ " × $\frac{1}{4}$ "	"	929	
W. I. pipe, 2 inches diameter	R. ft.	22	
Do. $1\frac{1}{2}$ " do.	"	473	
Do. 1 " do.	"	4,200	*b* 500
Do. $\frac{3}{4}$ " do.	"	12,076	*c*
Do. $\frac{1}{2}$ " do.	"	$139\frac{1}{2}$	*a*
Do. $\frac{1}{4}$ " do.	"	1,762	

CHEPAUK,
28th October 1880.

(Signed) S. C. PLUMMER, Lieutenant,
Assistant Engineer.

38. The Committee are of opinion that an unnecessarily large quantity of stock has been accumulated in several of the divisions, and the Committee recommend that the amounts entered in the enclosed statement should be considered as the limit of stock reserve.

Those divisions are omitted in which there is access by railway to the head-quarters, with the exception of Tanjore and Negapatam. In these two divisions a reserve supply of rough stone is required for the immediate protection of the larger irrigation works, but stock appears not to be necessary in the other divisions. In the Godávari and Kistna Deltas a stock of timber is represented to be indispensably required by the Superintendents of Works. Separate columns are entered in the statement for building materials, timber, metals, and a general head miscellaneous is given to comprise other stores. The Committee recommend that the reserve stock should be limited to the amounts under each head, and that the total should not be available to increase the limit given for any separate head. If the specific sums have been set down at figures which some experience shows to be too low, it will remain for the officers to show cause to the Government before an increase is allowed.

Statement showing the limit of reserve stock proposed for Executive Divisions.

Divisions.	Building Materials.	Timber.	Metals.	Miscellaneous.	Total.	Remarks.
Vizagapatam	...	...	...	500	500	No railway.
Dowlaishweram Workshops.	...	9,000	6,000	15,000	30,000	.....
Godávari Eastern ...	5,000	10,000	...	5,000	20,000	.....
Do. Western ...	...	500	...	500	1,000	.....
Kistna Eastern ...	3,000	10,000	5,000	2,000	20,000	Includes workshops.
Do. Western ...	...	500	...	500	1,000	
Nellore	...	1,000	...	500	1,500	
Cuddapah	...	...	...	...	...	
Buckingham Canal ...	...	...	...	...	...	On railway.
Salem	...	...	...	...	...	
West Coast	2,000	...	...	...	...	
Coimbatore	...	...	...	...	2,000	
Tinnevelly	...	...	...	...	...	
Trichinopoly	...	...	...	...	...	On railway.
Tanjore	12,000	...	...	...	...	
Negapatam	3,000	...	...	...	12,000	
South Arcot	...	...	...	...	3,000	
North Arcot	...	...	...	...	...	
Chingleput	...	...	...	...	...	
Presidency	...	...	...	...	...	On railway.
Architect	10,000	...	...	...	...	
		...	...	...	10,000	

39. MADRAS MINT MACHINERY.—The machinery and stores of the Mint have been lying unused for some years. Endeavours have been made to dispose of these superfluous stores at Calcutta and Bombay, but the engines, cranes, &c., entered in the enclosed list are still left in charge of the Storekeeper.

There is no probability of the Mint stores being turned to account again. The remarks made in the list show almost all the items "repairable;" in other words they are deteriorated and useless; and the Committee recommend that the whole should be sold off, although they believe that not more than the value of old iron will be realised.

List of Machinery, &c., belonging to the late Mint in the custody of the Storekeeper of Machinery.

Description.	Number or Quantity.	Remarks.
Crabs, double purchase ... ... No.	2	Repairable.
Crane, 2 tons ... ... „	1	Do.
Crane, small ... ... „	1	Do.
Crane for lifting crucibles ... ... „	1	Do.
Engines, 15 horse-power, combined in one ... ... „	2	Do.
Boiler for 12 horse-power vertical engine ... ... „	1	Do.
Engine, 12 horse-power, with boiler ... ... „	1	Engine repairable, boiler unserviceable.
Do. 6 do. vertical tubular ... ... „	1	Repairable, do.
Do. 6 do. do. ... ... „	1	Unserviceable.
Fan blower, patent ... ... „	1	Repairable.
Fly wheels, spare ... ... „	1	Serviceable.
Lathes, C. I., turning, 6 feet ... ... „	6	Do.
Do. do. 8 „ ... ... „	2	Repairable.
Do. do. 9 „ ... ... „	1	Do.
Do. do. 10 „ ... ... „	2	Do.
Do. do. 12 „ ... ... „	1	Do.
Do. do. 14 „ ... ... „	1	Do.
Do. wooden, turning, small ... ... „	1	Do.
Do. screw cutting, 12 feet bed with 5 feet bed attached ... ... „	2	Do.
	1	Do.

List of Machinery, &c.—*cont.*

Description.	Number or Quantity.	Remarks.
Machines, coin sorting, with 40 beams for ½ rupees... No.	1	Repairable.
Do. wheel, teeth cutting ... ... „	1	Do.
Do. drilling, 6 feet ... ... „	1	Do.
Do. laminating ... ... „	5	Unserviceable.
Do. marking ... ... „	2	Repairable.
Do. planing, 12 feet ... ... „	2	Do.
Do. do. 3 „ ... ... „	1	Do.
Do. polishing disc ... ... „	1	Do.
Do. punching and shearing ... ... „	1	Do.
Saws, circular, of sizes ... ... No.	21	...
Machine, platform weighing, to weigh one ton ... „	1	Repairable.
Presser, die, multiplying ... ... „	3	Do.
Tables, cutting C. I., fly ... ... „	24	Do.
Do. do. hand ... ... „	3	Do.
Do. do. brass, hand ... ... „	9	Do.
Bucket, foundry, large geared ... ... „	1	Do.
Shafting, of sizes, W. I. ... ... About feet	100	Do.
Pulleys, of sizes, for shafting ... ... No.	64	Do.
Brackets, C. I., do. ... ... „	64	Do.
Couplings, C. I., do. ... ... „	11	Do.
Ladder, wooden, square ... ... „	1	Do.
Hand-cart ... ... „	1	Do.
Table, circular, saw ... ... „	1	Do.

40. TANJORE DIVISION.—In this division there is stock to the nominal value of Rs. 17,900, out of which it is proposed to retain nearly the whole at its full book value for use on works. A few articles aggregating in value not more than Rs. 50 will be sold, and the trifling loss on these items may, the Committee consider, be debited to Profit and Loss.

In this division it is necessary to maintain a considerable amount of stock in the shape of reserve store for use on anicut aprons; the exact amount necessary to be thus retained is still under consideration, but for the present the Committee recommend that the limit of value be fixed at Rs. 12,000.

41. NEGAPATAM DIVISION.—In this division there was on the 1st of October 1880 stock in hand to the nominal value of Rs. 3,176-4-9 and to an estimated actual value of Rs. 1,532-8-8. The Superintending Engineer proposes to retain the whole of this for use on the works, but to reduce its value from the former to the latter sum; as, however, the difference would necessarily be charged to the works in question, it seems unnecessary to make any alteration, and the Committee recommend that the items stand as at present until used, when they should be charged at their full book value to the work concerned. In this division, as in Tanjore, the amount of stock necessary to be permanently retained is under consideration. For the present the Committee consider that a limit of Rs. 3,000 may be fixed.

In the Trichinopoly, South Arcot, and Tinnevelly Divisions there is now no stock, nor does there appear any necessity for maintaining any.

42. FAMINE TOOLS.—In many districts there are large number of tools that were obtained for famine relief works, but that will not be required collectively again until there is another time of severe distress.

The charge of surplus tools is a burden on the Executive Officers of the Public Works Department; and the Committee recommend that the Executive Engineers should be authorised to transfer to their ordinary lists such serviceable tools as they may require for regular use, to sell off all unserviceable tools, and either to sell locally or to send to Madras to the Public Works Stores; or otherwise dispose of, as may be directed, the rest of the tools, which, though serviceable, are of no use in the districts.

(Signed) H. L. PRENDERGAST, Lieut.-Col., R.E.
(„) D. H. TRAIL, Major, R.E.
„) J. PENNYCUICK, Major, R.E.

11th March 1881.

No. 6 E.W.

Memorandum on Committee's Report on Superfluous Stock in the Divisions.

NELLORE DIVISION.—The cast iron calingulah posts would be of very small value if sent to Madras as old iron. There are not very many, and though calingulahs are but seldom used now-a-days, these posts might be utilized for— Paragraph 6.

(1) small regulating works in the delta;

(2) the grooves of tank and distribution sluices.

This will be much better than treating them as old cast iron.

2. DUMAGUDIEM.—All the useless stores and materials should be sold. There is no market there for metals, &c., of value, and I think therefore the valuable articles should be transferred elsewhere at prices not in excess of current market rates. There was a small planing machine which is wanted at the Bezváda shops, and there was a vertical boiler and engine said to be in good order which can be utilized either in the Godávari or Kistna. There are also many cranes. What is wanted is a descriptive priced list. At Sitanagram an indifferent crane has been put up since last year for the stop gate of the head lock. It would have been better and cheaper to have got a crane from Dumagudiem. Paragraph 8.

3. FLOATING PLANT—GODAVARI.—This plant is not in excess, and whenever any vessel becomes unserviceable the necessary orders are issued by Government on receipt of a report to that effect. Paragraph 9.

4. STEAMER "PRINCE."—I think the Committee's recommendations at the end of this paragraph are based on a misapprehension. The *Prince* has never belonged to the delta, but was procured for the navigation of the river like the other Upper Godávari Steamers. It should be sold if possible, but the proceeds will not belong to the delta. Paragraph 10.

5. DOWLAISHWERAM WORKSHOP.—The probability is that the stock generally is not excessive, but that an annual clearance sale is needed to get rid of things which are useless and which are borne on the lists at a value which does not represent the true value. A considerable stock of timber is necessary, and of stores also, because the first is procurable only at certain seasons and the latter include very many descriptions. If the officer in charge have judgment, the stores long in hand should be of small value. The interest on 10 or 15 thousand rupees is small, but the inconvenience of having to wait for material which is wanted for a special purpose is great. Paragraph 11.

6. No remarks required. Paragraph 12.

7. GODAVARI EASTERN DELTA DIVISION.—The only stock needed in this division is that of building materials, viz., stone of sorts, lime and limestone. I see no reason why there should be any metals. Those not wanted for the shops should be sold if possible. No doubt the figures as shown are the result of the wholesale transference of stores from the Upper Godávari. The value of building materials in hand should depend upon the annual demand. This division supplies materials to nearly the whole of the delta. Paragraph 13.

8. KISTNA EASTERN DELTA DIVISION.—I agree generally with the Committee's recommendations. It is probable that there are many things which are either not wanted at all or are in quantities in excess of requirements. It would be well to send any things to Madras which are likely to be readily saleable there, or which the Public Works Workshops and Stores would be willing to take. For the rest I should be inclined to work down the stock by avoiding further purchase as much as possible. I endeavoured recently to impress on the local officers the necessity for turning to Paragraphs 14 to 16.

account the material available. This has not been done to anything like the extent desirable.

It would be a waste of money to send the Stoney's valve to Madras or anywhere until it is wanted for a definite work. It was intended for a supplemental head sluice for the Kistna Western Delta Main Canal, and it may yet be wanted for that, and if not, it is more likely to be utilized for some other head sluice or surplus sluice in the Kistna than elsewhere.

9. I am entirely unable to agree with the Committee's recommendation that the reserve of stone, cubes, &c., in the Tanjore Division should be limited to 12,000 rupees. There are scores of most important works, such as anicuts, regulators, surplus works, &c., and there is no stone to be had within many miles of them. Cubes are used in some places instead of stone, and must of course be made at the proper season. Stone also, where procurable at all, can be carted only at certain seasons. I consider the present stock, valued at Rs. 17,900, much too small. The reserve at each work should be a percentage of the contents of the aprons, the percentage in each case being fixed with reference to the circumstances of the work. At my inspections of the last two years I found that some of the outer aprons had almost entirely disappeared, and that there was no material available for their replacement. At the lower anicut on the Coleroon there were no cubes in stock, though a large quantity was needed for immediate use. I think it probable that 40 or 50 thousand rupees would be a reasonable reserve to maintain in this division. Paragraph 40.

10. NEGAPATAM DIVISION.—The works for which a reserve of stone or cubes is needed are much fewer than in Tanjore and of smaller size. The value of the reserve will certainly have to be increased. Paragraph 41.

CHEPAUK, (Signed) JOHN MULLINS, Col., R.E.,
17th March 1881. Chief Engineer for Irrigation.

To the Chief Engineer, Public Works Department.

No. 23. ORDER THEREON, 4th April 1881, No. 914 W.

THE Government consider the following modifications of the Committee's proposals desirable:—

CUDDAPAH DIVISION.—The doors and windows provided for the Bookapatnam Cutcherry will be retained till the 1st August 1881; if no allotment for the work is made by that date, they will be sold as proposed. The loss on the rate of materials prepared for the Nandyál Cutcherry will be debited as proposed if sanction to the estimate is given by the 1st August; if not, the loss will be debited to "Profit and Loss." Paragraph 4. Paragraphs 5 and 7.

NELLORE DIVISION.—The iron calingulah posts should be retained for use if required on minor irrigation works. The cast iron truck wheels will be sent to Madras for disposal. Paragraph 6.

CUDDAPAH DIVISION.— } The proposals should be modified in accordance with paragraph 2 of the Memorandum of the Chief Engineer for Irrigation. If the disposal of these stores be incomplete at the close of 1881-82, outright sale of the remainder will be resorted to in the following year. Paragraph 7.
UPPER GODAVARI.— } Paragraph 8.

GODAVARI—FLOATING PLANT.—The *Little Nell* and *Fawn* will be sold outright early in 1882-83 if not previously disposed of. Paragraph 9.

Paragraph 10. The proceeds of the sale of the *Prince* will be credited to "Provincial" and not to "Productive Public Works."

DOWLAISHWERAM WORKSHOP.—A large stock of timber is no doubt essential,

Paragraph 11. but every effort must be made to get rid of useless articles and keep down the value of stores by judicious sales as nearly as may be possible to the sum named by the Committee.

GODAVARI EASTERN DIVISION.—No metals not required in the shops should be

Paragraph 13. retained, arrangements being made for the sale of the remainder during the current year. Stone, lime, and limestone will be alone retained in such quantity as may be deemed essential by the Superintendent of Works.

KISTNA EASTERN DIVISION.—The "Stoney's equilibrium valve" should be retained

Paragraph 16. at Bezváda. The stock should be brought down to the limit of Rs. 48,000 by the end of the current year if possible, and by the 1st August 1882 at furthest.

Paragraph 23. PRESIDENCY STORES.—The result of the action now proposed will be reported on at the end of the current year.

CONSULTING ARCHITECT.—It is greatly to be regretted that the proper price for the

Paragraph 24. material turned out was not charged in the first instance to the works supplied; there is now no alternative to the disposal recommended by the Committee.

PRESIDENCY WORKSHOPS.—A special report will be submitted at the end of

Paragraph 28. September 1881 on the result of the action proposed in this paragraph.

The undue and apparently unauthorised increase of establishment is very unsatis-

Paragraph 31. factory, and the General Superintendent will furnish early explanation on this subject and show at once how the establishment can be reduced to at least the previous average.

Paragraph 33. The books proposed by the Committee will be at once opened and kept posted to date.

BUCKINGHAM CANAL.—The Superintendent of Works will be careful not to dispose

Paragraph 34. of tools that may possibly be useful in the completion of the works of the canal.

Paragraph 36. PRESIDENCY GAS WORKS.—This paragraph will be referred for consideration in the Military Department.

Paragraph 37. PIER STORES.—The stores will be handed over at once to the Master Attendant.

TANJORE DIVISION.—The Superintending Engineer will report at an early date with

Paragraph 40. reference to paragraph 9 of the Memorandum of the Chief Engineer for Irrigation, after which final orders will be passed as to the future limit for stock in this division.

Paragraph 42. FAMINE TOOLS.—This paragraph will be referred to the Government of India for consideration.

2. Except in so far as they are modified by the foregoing remarks, the Committee's recommendations are accepted in their entirety, and will be carried out without delay; and the Government desire to impress upon officers of all ranks the absolute necessity for avoiding undue inflation of the stock accounts either by over-manufacture or by insufficient debits to works.

3. All sales made under the instructions now given should be extensively advertised in local papers, and special care should be taken to ensure information on the subject reaching the mining districts where there may probably be a demand for some of the surplus stores.

4. The Committee appointed in G.O., No. 2,276 W., of 1st October 1880, having brought to a satisfactory conclusion the laborious inquiry with which they were charged, the Government desire to place on record their appreciation of the thorough and satisfactory manner in which they have discharged the duty assigned to them.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
" Superintendents of Works.
To the Chief Engineer for Irrigation.
" Consulting Architect to Government.
" General Superintendent, Public Works Stores and Workshops.
" Examiner of Public Works Accounts.
" Military Department.
" Marine "

Exd. E. C. Shunker, W. J. Lewis, and A. F. Goodall.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

SUPERINTENDING ENGINEERS,

&c., &c., &c.

Dated April, 4th.

Issued

Recd. *Encl.*

G. O., 4th April 1881, *No.* 914 W.

APRIL.

Nos. 22-23.

Superfluous Stock of the Public Works Department, &c.—Orders on proposals of the Committee appointed to investigate and report upon the —.

P. W. DEPARTMENT—1881-82.

~~MEMORANDUM.~~

Current No. 1496

Letter Number 2587/Kol.

dated the 31 March 1882.

from the Supg. Engineer of 2nd Circle

Note of Remarks

The Estimate of the cost of sending surplus Machinery remaining in the Kistna Eastern Division, & the P.W. stores at Madras under authority conveyed in G. O. dated the 4th April 1881. amounts to Rupees 600-

The Rate entered is considered fair.

10-3-82

GENERAL.
ACCOUNT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

SUPERINTENDING ENGINEERS,

&c., &c., &c.

Dated April, 4th.

Issued

Recd. *Encl.*

G. O., 4th April 1881, *No.* 914 W.

APRIL.

Nos. 22-23.

Superfluous Stock of the Public Works Department, &c.—Orders on proposals of the Committee appointed to investigate and report upon the —.

No. 2587 R.S. SUPERINTENDING ENGINEER'S OFFICE 2nd CIRCLE
STATION Masulipatam, 3rd March 1882.

FROM,

THE SUPERINTENDING ENGINEER
2nd Circle.

TO,

THE Chief Engineer
Public Works Department.

SIR,

Enclosures. (Estimate in Duplicate)

I have the honor to forward herewith for your Sanction, an Estimate amounting to Rs: 600, being the Cost of Sending Surplus Machinery, remaining in the Kistna Eastern Division, to the Public Works Stores at Madras under authority conveyed in G. O. No. 914. W of the 4th April 1881, and to request that funds may be allotted under "Provincial, Tools and Plant, Repairs and Carriage".

2. The bulk of the Machinery has been despatched, but 18 or 20 Tons are still

at Bezwáda owing to the failure of the
Buckingham Canal Navigation Company
to keep to their agreement.

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

J. W. Rundall
Superintending Engineer,
2nd Circle.

Comptr Genl.

G.O. 914 W. 4.4.88

From, P. W. D. No 1496

The Superintending Engineer
2nd Circle

To, The Chief Engineer
P. W. Departt.
Madras

Dated 3rd Dec 1882
Recd. 8

No 2587 Rs.
Encl 2.

Machinery. Surplus.
Cost of sundries ~~for~~ forwarded
for sanction an Estimate
amounting to Rs. 600
being that to the Public
Works Stores at Madras.

Ex 19/3 P. W. D.

C. No. 1496

P. W. Secretariat.

Note by Budget Section.

Work	Remarks and References.
Pending Surplus machinery, remaining in the Western Eastern Division, to the P. W. Stores at Madras under authority conveyed in G.O. No 914 W/ the 4 April 1881	

Fund Provincial Services (Original)
Service Head ... ... ~~Rs.~~
Departmental Head Tools & Plant ,,
Amount of estimate ... ... ,, Rs 600
Expenditure in previous year ... ... ,, "
Allotment in current year ... ... ,, "
Balance required ~~to complete~~ ... ... ,, 600

Total Rs... 600

Note of available funds.

An allotment of Rs 600 can be made from the Provincial Reserve, of which Rs 76,000 are now available, to the Western Eastern Division under Tools & Plant, Repairs & Carriage to ~~have~~ enable the Superintending Engineer to meet this cost

CH 11/3

11/3
Budget Clerk.

Note by Budget Section.

No 692 W.

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 17th March 1882

Read the following :—

From the Supdg: Engr 2d Circle N.C. No 2587 K. S dy 13th March/82

The estimate amount-
-ing to Rs 600, for cost of
sending machinery from
the Kistna Eastern Division
to the P.W. Stores at Madras
is sanctioned, and an
allotment to that extent
is made to the division
under Tools and Plant,
Repairs and carriage, from
the Provincial Reserve.

2. This sanction has been
registered as Provincial —
No 137 W of 1881-82 and
classified as Tools and
Plant.

13.3.82

13.3.82

To
The S.E. 2d Circle
with orgl estte.
" Exr P.W. accts
with dupte estte.
Despd 18-3-82.

B. No 692 W d/17 - Mar 82

Sch. in Receipt Regr