(1) பக்கங்களின் எண்ணிக்கை 6

(2) புதுக்கித் திருப்பிய நாள் 19/1/91

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

82

PWD துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	1203
அச்சகம் பலவகை	
நாள் :	11.4.1892

198 .

35 Sheets

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

DN

ஆணை: கா-1—12,006—15-6-87.

Copy of letter No 279 dated 28 October 1891 from M.R.Ry. S. Subroya charriar avl B.L.B. Rai Bahadur Executive Engineer Dindigul to the Superintending Engineer 2nd Circle

1203
J

With reference to your endorsement No. 1951 of 19th October 1891 only & No. 2621 W of 30th September 1891, I have the honor to state that there are no buildings available for rent except the Overseers shed at Kuddapah and Sub Divisional Officers Quarters at Madanapally after completion.

2. I do not know what to pay of the general Inspection sheds. They do not fetch rents but require repairs &c

---

Copy of letter No. 341 dt 24 November 1891 from John G. Johnston Esquire Executive Engineer Kurnool to the Superintending Engineer 2nd Circle

---

With reference to your endorsement No. 1951 only & No. 2621 W dated 30-9-91, I have the honor to inform you that in the monthly return Form No. 41 sent to

the

Examiner only one building (under Irrigation) viz. the Executive Engineer's Bungalow at Kurnool is shewn as the one requiring Capital and Revenue accounts. All others both in the Provincial and Irrigation Returns are classed as those not expected to yield interest on cost of construction or under Casual rents

2. No petition therefore seems necessary in this Division

Copy of letter No. 5631 d/26 February 1892 from J. Peters Esquire Executive Engineer Bellary Dn to the Superintending Engineer 3d Circle

---

With reference to your endorsement No 1951 d/19 October 1891, calling on me for report on paras 2 and 3 of P.D. Pro 2162 W d/30th September 1891, regarding the submission of proposals for the disposal or utilization for other purposes of such of the buildings as are not likely to be again required for the accommodation of Government Servants, I have the honor to suggest that the following buildings may be removed from the category of Public buildings

rented

rented and available for rent for the reasons stated against each of them

1. Old Range Office at Gudlighy. This building was ordered to be sold in P.D. Pro 3229 W d/12 October 1888 and it is not therefore likely to be again occupied as quarters.

transferred free of charge to the Local Board Gudlighy

2. Thatched shed for P.W.D. subordinates at Adoni. This shed was transferred to the Municipality under the orders conveyed in P.D. Pro. 3862 W d/30 December 1887 and was lately burnt down to the ground.

Sent to D & W dept for Circ 1104/92 dm 2.4.92.

1887

3 Range Office at Anantapur
4 Collector's Bungalow at Anantapur
5. Combined Offices for Superintg and Executive Engineers
6. Old Engineer's Office & Yard
7 - Telegraph Office

these are now occupied as public offices and are not therefore available for rent vide para 20 b (1) of the P.W. Code

---

(True copies)

Wm. Upston
Head Clerk
Superintg Engineer's Office
3d Circle

4-4-92

No. 46

Superintending Engineer's Office,
3RD CIRCLE.
Bellary 4th April 1892.

FROM J. W. Martin Esquire
SUPERINTENDING ENGINEER,
IIIRD CIRCLE.

1283
3

To THE Chief Engineer
P.W. Department
Madras

Sir,

Enclosures. 1

Adverting to paras 2 & 3 of G.O. No. 2621 W dt 30 September 1891, regarding the buildings that are not likely to be required for the accommodation of Government servants I have the honor to forward copies of correspondence received from the Executive Engineers submitting proposals for the removal of certain buildings from the category of buildings available for rent.

I have the honor to be
Sir
Your most Obedient Servant

J. W. Martin
Superintg Engineer 3rd Circle

3730

23-9-11 V

From,

The Superintending Engineer,
IIIrd Circle,
Bellary.

To,

The Secy Engineer &
Rly Departt
Madras

Dated 4 } April 1892.
Received 6 }

Enclosures. Nil

No. 46

Subject.

Buildings

Forwarding copies of correspondence regarding Executive Engineer's proposals for the removal of certain from the Category of Buildings procurable for rent.

No 940 W 4/28-3-83
" 920 W 4-4-84
" 2787 W 7-11-84
" 3298 W 20-11-87
" 478 C 28-1-90
" 636 W 28-2-90
" 912 W 20-3-90
" 1233 W 28-4-90
" 5067 C 5-11-89
" 3662 W 30-12-89
" 2955 W 29-1-90
" 1063 C 14-2-91
" 1577 C 19-3-91
" 3188 W 27-11-91
" 96 W 5-1-92

No 1656 W 7/14-6-90
" 139 W 15-1-92
" 1045 W 10-1-91
" 707 W 12-3-91
" 1056 W 16-4-91
" 1314 W 13-5-91
" 598 C 5-2-92
" 639 W 26-2-92
" 2621 W 30-9-91
" 3307 W 7-12-91
" 900 W 18-3-92

No 1203 W 7/11 April 92

The buildings named by the Executive Engineer Bellary division will be omitted from the capital and Revenue accounts

Duly
6-4-92

(3)

S.E. III circle
Exr. P.W. Dept.
11/4/92

8/4 7/4

13/4

PROCEEDINGS OF THE COURT OF WARDS

READ—the following paper :—

No. 1021 C.

MEMORANDUM.

The undersigned has the honour to forward the accompanying list of works in estates under the Court of Wards proposed to be carried out by the Public Works Department during 1892–93 (fasli 1302) and to request that, if approved, a sum of Rs. 38,868, as shown in the margin, may be placed at the disposal of the Public Works Department.

	RS.
Works	31,600
Establishment at 23 per cent. ...	7,268
Total ...	38,868

2. No provision has been made for works in the undermentioned estates for the reasons noted against each.

Chakipally and Chidikada estates.—It is reported that such works as are needed have already been put in hand in the current year and that no allotment of funds is required for 1892–93.

Jarada estate.—The Collector of Ganjam states that the estate is already in debt and that special application for funds will, if necessary, be made next year for any urgent work that may be required.

(By order.)

(Signed) O. V. BODDY, Major, R.E.,
Under Secy. to Govt., P.W.D.

MADRAS,
26th February 1892.

To the Secretary, Court of Wards, with copies of two statements through the Revenue Department.

ENCLOSURE No. 1.

LIST of works in estates under the Court of Wards proposed to be carried out by the Public Works Department during 1892–83.

Name of estate.	Heads.	Name of works.	Details of lump sums applied for for 1892–93.	Total.
		Ganjam Division.	RS.	RS.
Dhárákót	Irrigation, Original Works.	Constructing an escape to Gollabando Augulo of Goontoopada	200	
		Constructing a sluice to Bamsiolondko of Boringuda	200	
		Constructing a sluice to Pollibondko of Ballichayi	250	
		Constructing a weir to Dharbharajolo Ghayee near Suppuvapalli	350	1,000
Bodogodo	Do. ..	Constructing a sluice to Jamibondho of Chikkali	250	
		Constructing a sluice to Kondalabondho of Kaspa Karidakona	250	500
Aska	Do. ..	Constructing a dividing dam to Thothra Hend Nalla of Bhagoona river from Mantrapada village lands	300 200	
		Constructing a sluice to Koipulia Nalla ..		500

List of works in estates under the Court of Wards proposed to be carried out by the Public Works Department during 1892–93—*cont.*

Name of estate.	Heads.	Name of works.	Details of lump sums applied for for 1892–93.	Total.
		Ganjam Division—cont.	Rs.	Rs.
Kallikót and Atagadá.	Irrigation, Original Works—*cont.*	Improvements to Pedda tank of Chendapur, Kallikot	200	
		Improvements to Nimmibondho of Payikipada, Kallikot	200	
		Improvements to Bodobondho of Padmapur, Nowgam, Kallikot	200	
		Improvements to Ranibondho of Pasi, Nowgam, Kallikot	200	
		Improvements to Depabondho of Bejjipotto, Kallikot	200	
		Improvements to Karadabodi Ghayee of Bikatapada, Kallikot	500	
		Constructing a sluice to Bodasagaram tank of Mathura, Atagadá	300	
		Constructing a sluice and weir to Boda Augulo of Gongapur, Atagadá	800	
		Constructing a sluice and weir to Sora Ghayee of Baliapalli, Atagadá	500	
		Constructing a sluice to Vasanthara Ghayee of Sundarapada, Atagadá	400	
		Total, Irrigation, Original Works ..		3,500
Dhárákót	Buildings, Original Works.	Constructing Royal visitors' quarters at Dhárákot	1,000	1,000
Bodogodo	....	Constructing a compound wall with Simhadwaram entrance	1,000	1,000
Kallikót and Atagadá.	....	Constructing a compound wall to Jagannadhaswamy's temple, Kallikot	1,500	
		Constructing a compound wall to maid servants' lines in Nermalajhoro compound near Kallikot	1,500	
		Total, Buildings, Original Works ..		3,000
Dhárákot	Repairs, Irrigation ..	Special repairs to Gollabondho Augulo of Goontoopada		5,000
		Repairs to Rajah Ghayee of Nalabanta ..	700	
		Repairs to Bodobondho of Patrapore ..	200	
		Repairs to Vasarapalli, Augulo	200	
		Repairs to Dowgam Hozzo	300	
Bodogodo	Do. ..		600	
Aska	Do. ..	Repairs to Barabara Ghayee of Matchakota.	700	2,000
		Repairs to Chorodo Ghayee of Sindhagadu.	300	
		Repairs to Demodarapalli Komma channel, an off take of the Rushikulya river ..	200	1,000
Kallikót and Atagadá.	Do. ..	Repairs to the right bank of the Mahánadi river between the boundaries of the Dhárákot and Kurla estates	800	
		Repairing Gondabondho of Borida, Kallikot.	100	1,000
		Repairing Borokoro Naidi Augulo of Barida, Kallikot	150	
		Repairing Balla Bondho of Boridi, Kallikot.	150	
		Repairing Hozzo Ghayee of Biribatia, Kallikot	100	
		Repairing Thommili Ghayee of Siridi, Kallikot	100	
		Repairing the Korokori river in Devalapada, Kallikot	150	
		Repairing the Korokori river in Konchera, Kallikot	200	
		Repairing Koirajala Bondho of Battupada, Kallikot	250	
		Repairing Kallingibondho of Amminia Gopopuram, Kallikot	250	
		Repairing Niwa Adiya of Gonda Nowgam, Kallikot	150	
		Repairing Hatta Hozzo of Kummudo, Kallikot	50	
		Repairing Palla Chara Adiya of Bodarampalli, Kallikot	200	
		Repairing the Korakari river in Ballya, Kallikot	200	
		Repairing Bahada Augulo of Bodamadhopuram, Kallikot	200	
		Repairing Khojarabondho of Bodamadhapuram, Kallikot	200	

List of works in estates under the Court of Wards proposed to be carried out by the Public Works Department during 1892–93—*cont.*

Name of estate.	Heads.	Name of works.	Details of lump sums applied for for 1892–93.	Total.
		Ganjam Division—cont.	Rs.	Rs.
Kallikot and Atagadá —*cont.*	Repairs, Irrigation ..	Reparing Jayamangolam Nalla, Konigam, Kallikot	200	
		Repairing the Johno river in Vistunola, Kallikot	200	
		Repairing Bodabondho of Chengudi Khotto, Kallikot	250	
		Repairing Sugarabondho of Mandala, Kallikot	200	
		Repairing Jorobondho of Thalagam, Kallikot	250	
		Repairing Adobondho of Bodakara Kamma, Kallikot	250	
		Repairing Nisubondho of Payikipada, Kallikot	100	
		Repairing Bodobundho of Padmapuram Nowgam, Kallikot	100	
		Repairing Naiks Hozzo of Naikampallam, Kallikot	100	
		Repairing Jangighoro of Namadolo, Kallikot	100	
		Repairing Batti Ghayee of Vodoridi, Kallikot	100	
		Repairing Karadabodi Ghayee of Bikkapada, Kallikot	200	
		Repairing Sadi Hatya Ghayee of Khojapalli, Kallikot	200	
		Repairing Hazzobondho of Royapada, Kallikot	100	
		Repairing Ranibondho of Pasi, Nowgam, Kallikot	100	
		Repairing Depabondho of Bejjiputto, Kallikot	100	
		Repairing Kokidiabondho of Kondigam, Kallikot	100	
		Repairing Kommaribondho of Koiraso, Kallikot	100	
		Repairing Vastala Munda of Koirasy, Kallikot	100	
		Repairing Hozzobondho of Bhalyaghora, Kallikot	100	
		Repairing Sasipanabondho of Sondamallo, Kallikot	100	
		Repairing Niwa Augulo of Sondamallo, Kallikot	100	
		Repairing Paluduva Ghayee of Mahaswarapuram, Kallikot	100	
		Repairing Kobibondho of Mahaswarapuram, Kallikot	100	
		Repairing Desabondho Nogi of Sabilia, Kallikot	100	
		Repairing Vosonodhipa of Sakuda, Kallikot.	100	
		Repairing Bodo Augulo of Gongapur, Atagadá	700	
		Closing breaches of Bamsomandally Nalla of the Donnai river in Gongapur, Atagadá. .	500	
		Repairing Dhollakattia of Machayee near the Rushikulya river, Atagada	300	
		Closing breaches of the left flood bank of the Bhaguva river, Baliasoro, Atagadá ..	100	
		Closing breaches of the right flood bank of the Donnai river in the Barida village, Atagadá	500	
		Closing breaches to Sora Ghayee of Baliapally, Atagadá	200	
		Closing breaches in Kora Ghayee of Potkara, Atagadá	500	
		Closing breaches in Vasandhara Ghayee of Sundarapada, Atagadá	200	
		Closing breaches in the banks of Ballamaru tank of Karida, Atagadá	500	
		Closing breaches in Jatikabody Bodabondho, Atagadá	200	
		Reparing the flood bank of the Donnai river in Balasoro, Atagadá	1,000	
		Closing breaches in the flood bank of the Donnai river in Bodochodiapada village, Atagadá	300	
				11,000
		Total, Repairs, Irrigation ..	..	15,000

List of works in estates under the Court of Wards proposed to be carried out by the Public Works Department during 1892–93—*cont.*

Name of estate.	Heads.	Name of works.	Details of lump sums applied for for 1892–93.	Total.
		Ganjam Division—cont.	Rs.	Rs.
Dhárákot	Buildings, Repairs ..	Repairs to thatched houses in Dhárákot palace	500	
Bodogodo		Repairs to tiled houses in Dhárakot palace ..	500	1,000
Aska	Do.	Repairs to thatched houses in Bodogodo palace	500	500
Kallikót and Atagadá.	Do.	Repairs to Malukdar's quarters at Aska ..	500	500
	Do.	Repairing the Santhomella in Kallikot palace	1,000	
		Repairing the buildings in Nirmalajoro near Kallikot	1,000	
		Repairing Panchabokara out-houses at Boirany	300	
		Repairs to out-houses to the zemindar's house next to Boirany cutcherry	200	
		Total, Buildings, Repairs ..		2,500
Do. do. ..	Communications, Repa rs.	Maintaining Haridamallo road and its branches, Kallikot	250	
		Maintaining town roads, Kallikot	150	
		Maintaining Sankarasawara Swamy's road, Kallikot	100	
		Total, Communication, Repairs ..		500
		Total, Ganjam Division ..		30,500
		Godávari Western Division.		
Lakkavaram	Irrigation, Works Original	Reconstructing masonry sluices of Kongara tank at Guravayagudem	1,100	1,100
		Total, Godávari Western Division ..		1,100
		Grand Total ..		31,600

ENCLOSURE No. 2.

ABSTRACT of the amounts required during 1892–93 (fasli 1302) for works proposed to be carried out by the Public Works Department in the estates under the Court of Wards.

Executive division.	Name of estate.	ORIGINAL WORKS.				REPAIRS.				Grand total.
		Irrigation.	Buildings.	Communications.	Total.	Irrigation.	Buildings.	Communications.	Total.	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam division.	Dhárákót	1,000	1,000	..	2,000	2,000	1,000	..	3,000	5,000
	Bodogodo	500	1,000	..	1,500	1,000	500	..	1,500	3,000
	Aska	500	..	..	500	1,000	500	..	1,500	2,000
	Kallikót and Atagadá ..	3,500	3,000	..	6,500	11,000	2,500	500	14,000	20,500
	Total ..	..	..	..	..	..	..	..	..	30,500
	Establishment at 23 per cent.	..	..	..	..	..	..	..	..	7,015
	Total, Ganjam division.	..	..	..	..	..	..	..	..	37,515
Godávari Western division.	Lakkavaram	1,100	..	..	1,100	..	..	..	..	1,100
	Establishment at 23 per cent.	..	..	..	..	..	..	..	..	253
	Total, Godávari Western division ..	..	..	..	..	..	..	..	..	1,353
	Grand total ..	..	..	..	..	..	..	..	..	38,868

No. 574, Revenue.

Forwarded to the Court of Wards.

FORT ST. GEORGE,
5th March 1892.

(Signed) C. A. GALTON,
Secretary to Government.

RESOLUTION—dated 12th March 1892, No. 900.

Communicated to the Collectors of Ganjam and Godávari, who are requested to place the requisite amounts at the disposal of the Public Works Department from the funds of the estates concerned and to make the necessary provision in their budgets for the ensuing fasli.

2. It is requested that arrangements may be made to utilise the entire allotment on account of the Kallikót estate before the elder minor comes of age on the 20th January 1893.

3. All Collectors in charge of Wards' estates are requested to submit their budgets punctually. Their attention will be drawn to paragraph 5 of Court's Proceedings, dated 16th April 1890, No. 878.

(True Copies and Extract.)

(Signed) H. A. SIM,
Acting Secretary.

To the Collector of Ganjam.
„ the „ of Godávari.
„ other Collectors in charge of Wards' estates.
„ the Secretary to Government, Public Works Department (through the Revenue Department).
„ the Accountant-General.

Exd. S. J. Pereira.

PUBLIC WORKS DEPARTMENT.

1892.

Court of Wards,

MADRAS.

Printed March th.

Proceedings, 12*th March* 1892, *No.* 900.

Communicating, with instructions, to the Collectors of Ganjam and Godávari budget estimates of works proposed to be carried out by the Public Works Department during 1892–93 (fasli 1302) and requesting the Collectors of Wards' estates to submit their budgets punctually.

No: 1235 Wa/13 apru

Comd. to the S.E. Circle for information and guidance.

(sd) O.O.B.

D.W.

The S.E. I Circle

Ister P.W. Accts

From

Lt. Col: R. R. C. Drake Brockman R.E.

Superintending Engineer

4th Circle

To

The Chief Engineer

Public Works Dept.

Dated 2nd
Despd. 3d } October 1891.
Recd.

Estate works to be carried out by the Public Works Department in the 4th Circle during the year 1892-93.

- Nil -

Rmedrnke-Brockman

Lt. Col. R.E.

Superintending Engineer 4th Circle

1871/1501 m'd
E 3

P. W. CURRENT No. 11209

From

The Superintending Engineer
5th Circle

To

The Chief Engineer
P. W. Department.

Dated 22nd
Received 28th October 1891

No. 490 W

Subject

Budget Estimate of works that are likely to be carried out by P.W. Department in the Estates under Court of Wards for 1892-93.

"Nil"

J. W. Campbell Major R.
Superintending Engineer Circle

C/pis
Encl
U-10 c

P. W. CURRENT No. 10483

From

The Superintg Engineer
3d Circle

To The Chief Engineer.
P.W. Department
Madras.

Dated 30 September/91
Despd
Recd 3rd Octr/91

Budget estimates for works that are likely to be carried out by the P.W. Department on the Estates under the Court of Wards for 1892—93.

Nil

A. Sankey Lt. R.E.
Superintg Engineer 3d Circle

B/

Abstract of the amounts required during 1892-93 (Fusli 1302) for works proposed to be carried out by the P.W. Department in the Estates under the Court of Wards in the First Circle.

Executive Division	Name of Estate	Original works. Irrigation	Original works. Buildings.	Original works. Communication	Original works. Total	Repairs. Irrigation	Repairs. Buildings.	Repairs. Communications	Repairs. Total	Grand Total
Ganjam	Dharakota	1000	1000	-	2,000	2,000	1000	-	3,000	5,000
	Bodagada	500	1,000	-	1,500	1,000	500	-	1,500	3,000
	Aska	500	-	-	500	1,000	500	-	1,500	2,000
	Kallikota & Attagada	3500	~~3000~~ 3000	-	~~6500~~ 8500	11000	2500	500	14,000	~~20500~~ 20500
									Total	~~32500~~ 30500
									Establishment charges at 23 per cent	~~7475~~ 7015
									Total Ganjam Division —	~~39975~~ 37515
Godavari Western	Lakkavaram	1100	-	-	1100	-	-	-	-	1100
									Establishment charges at 23 per cent	253
									Total	1353
									Grand Total	~~44328~~ 38868

12th October 1891.

S. D. Sankey
Supt. Engr. 1st Circle

* Under S.S. I.S. Letter No: 12206/N & M/07-12-91

Detail of the Budget Estimate of requirements in the Court of Wards Estates in the 1st Circle for the year 1892-1893- Fusli 1302-

Division-	Estates-	Items-	Amount required for 1892-93	Total
Ganjam Division-	Dharacota	Irrigation-		
		Original works	1,000	
		Repairs	2,000	3,000
		Buildings-		
		Original works	1,000	
		Repairs	1,000	2,000
	Badagada	Irrigation-		
		Original works	500	
		Repairs	1,000	1500
		Buildings-		
		Original works	1,000	
		Repairs	500	1500
	Aska	Irrigation-		
		Original works	500	
		Repairs	1,000	1500
		Buildings-		
		Repairs	500	500
	Kallikota & Attagada	Irrigation-		
		Original works	3,500	
		Repairs	11,000	14,500
		Buildings-		
		Original works	5,000	
		Repairs	2,500	7,500
		Communications-		
		Original works		
		Repairs	500	500
			Total Rs.	32,500

Divisions	Estates-	Items-	Amount required for 1892-93	Total-
		Irrigation- original works-		
Godavari Western-	Sakkavaram	Reconstructing masonry Sluices of Kongora Tank at Guravoyagudem	1100	1100
			Total Rs.	1100

G. D. W. Sykes,
Supt. Engineer 1st Circle-

12th October 1891-

JK

Pr 22 / 11006/91

Budget Estimate of re-
-quirements in the Court of
Wards Estates in the 1st
Circle for the year 1892-93
(Fusli 1302).

No. 372 G.L.

FROM,

G. D. Wyberow Esqre

SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO,

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

DOWLAISHWERAM, 12th October 1891.

Pencil
Budget.

SIR,

I have the honor to submit herewith the Budget Estimate for the Court of Wards Estates in this Circle for the year 1892-93 (Fusli 1302)-

2. The Ganjam Division officer has neither applied for funds for Chakipalli and Jarada Estates for 1892-93, nor has he furnished any details for the lump sums applied for for the Estates included in the Budget Estimate- He has been requested to report as to the cause of omitting these two Estates & to give details for the lump sums entered in the Budget Estimate; when a reply is received from him it will be communicated to you-

3. For the Chidikada Estate, the Executive Engineer Vizagapatam Division has not applied for any funds as it is believed that the only work "Bodderu Anicut" will be completed before the end of the current official year, with an additional grant which will be applied for shortly-

I

I have the honor to be,
Sir,
Your most Obedient &c.
J. D. Wyllow.
Sup.t Engineer 1st Circle.

JK

P. W. CURRENT No. 11006

FROM,

G. D. Wybrow Esq
SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO,

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

DATED 12th
DESPATCHED 14 October 1891.
RECEIVED 15

No. 372 G.L.

ENCLOSURES 1

SUBJECT.

Budget Estimate for the Canal & Wards Estates in the I Circle for the year 1892-93.
Submits ——.

B

B

No. 1041 G.N.

FROM,

G. D. Wybrow Esq.
SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO,

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

DOWLAISHWERAM, 14th November 1891.

SIR,

Cus 11006

With reference to para 2 of my letter No. 372 G.L. dated the 12th October 1891, I have the honor to state that the cause of omission to apply for funds for Chakipalli & Jarada Estates for 1892-93 is as follows:-

Chakipalli Estate.

The Executive Engineer reports that the only work in this Estate requiring attention at present, is Chakipalli Gadda Channu, and that funds for the same have already been allotted in the current year. Consequently no further funds for next year, will be required.

Jarada Estate.

The Collector states that this Estate is already in debt & that, in the event of any necessity arising for executing any urgent work, funds will be applied for specially.

2. The Executive Engineer states that details for the lump sums provided in the Budget Estimate will be submitted as soon as possible - & this information will be submitted to you as soon as it is received from the Executive Engineer -

I have the honor to be,

Sir,

Your Most Obedient Servt -

[illegible]

Supdg Engr 1st Circle.

EH

P. W. CURRENT No. /2233

FROM,

G. D. Weybourn Esq
SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO,

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

DATED 14
DESPATCHED 14 November 1891.
RECEIVED 21

NO. 1041 GN.

ENCLOSURES

SUBJECT.

Chakipalli and Jaradda Estates. Explaining the cause for not applying for funds for —— in the Court of Wards Budget Estimate for 1892-93.

B

Statement showing the details of Lump sums entered in the Budget Estimate of Wards Estate in the Ganjam Division for the year 1892-93.

Name of Estate	Sub Head & Classification	Details	Amount entered in the Estimate	Grand Total
Dharakotta Estate	Irrigation (Original works.	Constructing an Escape to Gollalandapalli	200	
		" a Channel to Gondhoda		
		Constructing a sluice to Bamudia bandha of Bangarda	200	
		Constructing a sluice to Pollibandha of Balliakapi	250	
		Constructing a sluice to Dharbharajida of Khayer near Lupsumpalli	350	
		Repairs to Gollabandha of Angulo	700	1000
		Special repairs to Gollabandha of Khayer of Kalabanka	200	
		Repairs to Bandha of Patrapore	200	
		Repairs to Khayer of Angulo	300	
		Repairs to Dharbharajida of Angulo	600	
		Carried over ——		2000
				3000

		Brought forward —		3000
	Buildings			
	Original works	Constructing Royal visitors quarters at Dharakota	1000	
				1000 √
	Repairs	Repairs to thatched houses in Dharakota palace	500	
		Repairs to tiled houses in do —	500	
				1000 √
Bodagada Estate	Irrigation			
	Original works	Constructing a sluice to Jamibondho of Chikkali	250	
		Constructing a sluice to Kondalabondha of Kaspa Koridokona	250	
				500 √
	Repairs	Repairs to Barabana Ghayee of Matcha-Kotta	700	
		Repairs to Chorada Ghayee of Sindhaguda	300	
				1000 X
	Buildings			
	Original works	Constructing a compound wall with Simhadwaram Entrance —	1000	
				1000 X
	Repairs	Repairs to Thatched houses in Boda-gada Palace.	500	
				500 X
Aska Estate	Irrigation			
	Original works	Constructing a dividing Dam to Tholtara Bend Balla of Bhagoona river from Mantrapada village lands	300	
		Constructing a sluice to Koipulia Balla	200	
				500 X
	Repairs	Repairs to Damodarapalli Komma Channel an off take of Rushikulya River	200	
		Repairs to Right bank of Mahanadi river between Dharakota & Kurla states boundaries.	800	
				1000 X
	Buildings			
	Repairs	Repairs to Khalukdars quarters at Aska.	500	
				500 X
		Carried over		10000

		Brought forward		10,000
Kallikota and Atagada Estate	Irrigation Original works.	Improvements to Cedda Tank of Chendapur in Kallikota	200	
		Improvements to Nimmibondho of Payikipada in Kallikota	200	
		Improvements to Bodo bondho of Padmapur Sowgam in Kallikota	200	
		Improvements to Panibondho of Pasi Sowgam in Kallikota	200	
		Improvements Depabondho of Bejjipotto in Kallikota	200	
		Improvements to Karadabodi Ghayee of Bikatapada in Kallikota	500	
		Constructing a sluice to Bodasagaram Tank of Mathura in Atagada	300	
		Constructing a sluice and weir to Boda Angulo of Gongapur in Atagada	800	
		Constructing a sluice and weir to 5000 Ghayee of Baliapalli in —do—	500	
		Constructing a sluice to Vasanthara Ghayee of Seindrapada in do	400	
			3500	
Rs. Repairs		Repairing Gonda bondho of Borida in Kallikota	100	
		Repairing Borakoro Naidi Angulo of Borida in Kallikota	150	
		Repairing Balla bondho of Borida in Kallikota	150	
		Repairing Aozzo Ghayee of Biribatica in Kallikota	100	
		Repairing Kommili Ghayee of Siridi in Kallikota	100	
		Repairing Korakori River in Devalapada in do	150	
		Repairing Korakori river in Konchera in Kallikota	200	
		Repairing Koirajalabondho of Batupada in Kallikota	250	
		Carried over	1200	13,500

Brought Forward	1200	13500
Repairing Kolingi bondho of Ammini a Gopapuram in Kallikota	250	
Repairing Nuva Adiya of Gonda - Nowgam in do —	150	
Repairing Katta Aozzo of Kammudo in — do —	50	
Repairing Palla chara Adiya of Boda Kampalli in — do —	200	
Repairing Kora kori river in Ballya in do —	200	
Repairing Bahada Augula of Boda - Madhapooram in do —	200	
Repairing Khojara bondho of Boda — Madhapuram in do —	200	
Repairing Jayamangalam Aullah Khonigam in — do ——	200	
Repairing Johno river in Vistumala in — do ——	200	
Repairing ~~bondho~~ Boda bondho of Chenguti		
Khotho in — do ——	250	
Repairing Sagara bondho of Mandala in do	200	
Repairing Joso bondho of Thalagam in do —	250	
Repairing Ado bondho of Boda kura Komma in do —	250	
Repairing Kinkan bondho of Payikipaa in — do ——	100	
Repairing Bodo bondho of Padma puram Nowgam in do ——	100	
Repairing Kaiko Aozzo of Kaikam - pallim in do —	100	
Repairing Jarijhoro of Kamadolo in — do ——	100	
Repairing Battighayee of Vodoridi in do	100	
Repairing Karadaboi Ghayee of Bikkapaa in do ——	200	
Repairing Sadi Katya Ghayee of Khojapalli in do ——	200	
	4700	13500

Brought forward ——	4,700	13,500
Repairing Kozzo bondho of Royapadoo in Kallikotah	100	
Repairing Rani bondho of Pasi Nowgam in do —	100	
Repairing Depa bondho of Bejjipatto in do —	100	
Repairing Kokidia bondho of Kondigam in do —	100	
Repairing Komman bondho of Koirasy in do-	100	
Repairing Kustala Manda of — do — in do-	100	
Repairing Kozzo bondho of Bhalyaghora in — do —	100	
Repairing Sasipana bondho of Sondamallo in — do ——	100	
Repairing Kuva Augulo of do — in do-	100	
Repairing Paludewa Ghaye of Mahaswara puram in do —	100	
Repairing Koki bondho of do — in do —	100	
Repairing Desa bondho togi of Salikia in — do ——	100	
Repairing Vosonodhipa of Sakuda in — do ——	100	
Repairing Kozzo bondho of Gongapur in Attagada	700	
Closing breaches of Bando — Mandally Ralla of Donnai river in do — do ——	500	
Repairing Dhollakatia of Machaye near Ruskikulya river in do ——	300	
Closing breaches of left flood bank of Bhagewa river Balia -toro in do ——	100	
Closing breaches of Right flood bank of Donnai river in Boruda Village in — do ——	500	
Closing breaches to Toro Ghaye of Balipally in — do —	200	
Closing breaches in Kora Ghaye of Pothara in do ——	500	
Carried over	8800	13,500

	Brought forward		4,700	13,500
	Brought forward		8,800	13,500
	Closing breaches in Vasandhara Khayee of Sundrapada in Atagada	200		
	Closings breaches in the banks of Ballamara Bank of Korida in do	500		
	Closing breaches in Jatikabody Bodabondho in do	200		
	Repairing flood bank of Domai river in Balasoro in do	1000		
	Closing breaches in the flood bank of Domai river in Borochodia pada Village in do	300		
				11,000
Buildings Original works	Constructing a compound wall to Jagannadha Swamy's temple in Kallikota	1500		
	Constructing a compound wall to Maid Servants lines in Nirmalajoro compound near Kallikota	1500		
				3,000
Repairs	Repairing the Santhomella in Kallikota Palace	1000		
	Repairing the buildings in Nirmalajoro near Kallikota	1000		
	Repairing Panchakokara out houses at Boirany — do to Out Houses to zemindars House next to Boirany Cutcherry	300 200		
				2,500
Communications Repairs	Maintaining Naridangallo road and its branches in Kallikota	250		
	Maintaining town roads in do	150		
	Maintaining Sankaradwara Swamy's road in do	100		
				500
			Total Rupees	30,500

Supt Engineer
Pte circle
15/12/91

Executive Engineer
Ganjam Division

Examined

Brought forward ____ 4,400 13,500

Sd 1/2/92

SUPERINTENDING ENGINEER
No. 1823
12 DEC.
FIRST CIRCLE.

Abstract of the amounts ... by the

No. 1220 G/N.

FROM, G. D. Wybrow Esq
SUPERINTENDING ENGINEER
FIRST CIRCLE.

TO, THE CHIEF ENGINEER
PUBLIC WORKS DEPARTMENT.

DOWLAISHWERAM, 17th December 1891.

Penalol
Statement.

SIR,

In continuation of para 2 of my letter
No. 1041 G.N. dated 14th November 1891 I have
the honor to submit herewith a detailed
statement of works to be executed in the Gan-
jam Division for the lump sums entered in the
Court of Wards Estates Budget for 1892-93.

2. The Executive Engineer states that of
Rs. 5,000 entered in the Budget under building
original works, against Atagada, Kallikota
Estate only Rs. 3,000 are required; however if
the excess amount (Rs 2,000) cannot be expend-
-ed on the incompte works of this year, he says
that so much of the amount as cannot be
spent will be surrendered in the next official
year.

C No. 12233/91
with B.

The S.E. may
kindly enter into correspondence

I have the honor to be,
Sir,
Your most obedient Sv.
G. D. Wybrow.
Supt. Engr. 1st Circle

VS

P. W. CURRENT No. 20

FROM,

G. D. Wybrow Esq
SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO,

THE CHIEF ENGINEER

PUBLIC WORKS DEPARTMENT.

DATED 17 December 189/.
DESPATCHED 3
RECEIVED — 4-1-92

No. 1220 G.N.

ENCLOSURES/

SUBJECT.

Statements of works to be executed in the Ganjam Dn. for the lump sums entered in the Court of Wards Estates Budget for 1892-93. Submits a detailed ——.

Abstract of the amounts required during 18 . . (1892) for works proposed to be carried out by the P. W. Dept. in the estates under the Court of Wards.

Executive division	Name of Estate	Original Works				Repairs				Grand Total
		Irrigation	Buildings	Communications	Total	Irrigation	Buildings	Communications	Total	
Ganjam division	Dharakot	1,000	1,000	-	2,000	2,000	1,000	-	3,000	5,000
	Bodogodo	500	1,000	-	1,500	1,000	500	-	1,500	3,000
	Aska	500	-	-	500	1,000	500	-	1,500	2,000
	Kallikot and Atagada.	3,500	3,000	-	6,500	11,000	2,500	500	14,000	20,500
	Total	..	..	..	..	..	.	..	..	30,500
	Establishment at 23 per cent	..	..	..	..	..	..	..	..	7015
	Total, Ganjam Dn.									37,515
Godavari Western Dn.	Lakkavaram	1,100	-	-	1,100	-	-	-	-	1,100
	Establishment at 23 per cent									253
	Total, Godavari Western Dn.									1353
	Grand Total									38868

FROM,

TO,

DA
DE
RE

Brought forward 4,400 13,500

Abstract of Wards & Prop
Department
Estates under the Court of Wards & Prop
be Carried out by the P. W. Dep
12-73

Name of Estate	Heads	Name of Works	Details of lump sums applied for for 1872-73	Total
		Ganjam Division		
Dharakot	Irrigation, Original Works	Constructing an escape to Gollabondo Anguto of Goontoopada	200	
		Constructing a Sluice to Bansiobondho of Boinguda	200	
		Constructing a Sluice to Pollibondho of Ballichayi	250	
		Constructing a weir to Dharbharajolo Ghayee near Suppuvapalli	350	
				1,000
Bodogodo	...	Constructing a Sluice to Jamibondho of Chikkali	250	
		Constructing a Sluice to Kondalabondho of Kaspa Koridokora	250	
				500
Aska	...	Constructing a dividing dam to Thothra Hend Nalla of Bhagoona river from Mantrapada village lands	300	
		Constructing a Sluice to Koipulia Valla	200	
				500
Mikot and	...	Improvements to Pedda Tank of Chendapur, Kallikot	200	
Cogada	...	Improvements to Nimmibondho of Payikipada, Kallikot	200	
		Improvements to Bodo bondho of Padmapur Nowgam, Kallikot	200	

List of Works in [illegible] proposed to be Carried out during 1892-93 – (Continued)

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
Kallikot and Atagada – contd.	Irrigation, Original Works (contd.)	Improvements to Rani Gondho of Pasi Nougam, Kallikot	200	
		Improvements to Depabondho of Bejjipotto, Kallikot	200	
		Improvements to Karadabodi Ghayee of Bikatapada, Kallikot	500	
		Constructing a sluice to Bodasagaram Tank of Mathura, Atagada	300	
		Constructing a sluice and weir to Boda Angulo of Gongopur, Atagada	800	
		Constructing a sluice and weir to Soro Ghayee of Baliapalli, Atagada	500	
		Constructing a sluice to Vasanthara Ghayee of Sundrapada, Atagada	400	
				3500
		Total, Irrigation Original Works		5,500
Dharakot	Buildings, Original Works	Constructing royal visitors' quarters at Dharakot	1000	1000
Bodogodo	...	Constructing a Compound wall with Simhadwaram entrance	1000	1,000
Kallikot and Atagada	...	Condructing a Compound wall to Jagannadhaswami's temple, Kallikot	1500	

Brought forward 4,400 13,500

B

List of Works in Estates under the Civil Department proposed to be Carried out by the P.W. Dept. during 1892-93

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
Kallikot and Atagada (contd.)	Buildings, Original Works	Constructing a Compound wall to maid Servants' lines in Nermalaporo Compound near Kallikot	1,500	3000
		Total, Buildings, Original Works		5000
Dharakot	Repairs, Irrigation.	Special repairs to Gollabondho Angulo of Goontoopada	700	
		Repairs to Rajah Ghayee of Nalabanta	200	
		Repairs to Bodobondho of Patrapore	200	
		Repairs to Vosarapalli Angulo	300	
		Repairs to Dowgam No 330	600	2,000
Bodogodo	...	Repairs to Barabana Ghayee of Matchakota	700	
		Repairs to Chorodo Ghayee of Sindhagada	300	1,000
Aska	...	Repairs to Dhamodarapalli Komma Channel, an offtake of the Rushikulya river	200	
		Repairs to the right bank of the Mahanadi river between the boundaries of the Dharakot and Kurla estates	800	1,000
Kallikot and Atagada	...	Repairing Gonda bondho of Borida, Kallikot	100	
		Repairing Borakoro Naidi Angulo of Borida, Kallikot	150	

P.W. Dep

List of Works in Estates under the Court of Wards proposed to be carried out by the P.W. Dept. during 1892-93 - (Continued)

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
Kallikot and Atagada (cont'd)	Repairs, Irrigation	Repairing Balla bondho of Bonida, Kallikot	150	
		Repairing Hozzo Ghayee of Biribatta, Kallikot.	100	
		Repairing Thommiti Ghayee of Siridi, Kallikot	100	
		Repairing the Korakori river in Devalapada, Kallikot	150	
		Repairing the Korakori river in Konchera, Kallikot	200	
		Repairing Koirajala bondho of Bathupada, Kallikot	250	
		Repairing Kolingi bondho of Ibnminia Gopapuram, Kallikot	250	
		Repairing Nuwa Adiya of Gonda Nowgam, Kallikot	150	
		Repairing Halla Hozzo of Kammudo, Kallikot	50	
		Repairing Palla Chara Adiya of Bodarampalli, Kallikot	200	
		Repairing the Korakori river in Balleya, Kallikot	200	
		Repairing Bahada Angulo of Bodamadhapuram, Kallikot	200	
		Repairing Vejara bondho of Bodamadhapuram, Kallikot	200	
		Repairing Jayamangalam Nullah Khonigam, Kallikot	200	
			2650	

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
Kallikot and Atagada (cont'd)	Repairs, Irrigation	Repairing the Johnori river in Visturnala, Kallikot.	2650	
		Repairing Bodabondho of Chengidi Khotto, Kallikot	200	
		Repairing Sagara bondho of Mandala, Kallikot	250	
		Repairing Jono bondho of Thalagam, Kallikot	200	
		Repairing Ado bondho of Bodakura Komma, Kallikot	250	
		Repairing Nimbondho of Payikipada, Kallikot	250	
		Repairing Bodo bondho of Padmapuram Nowgam, Kallikot	100	
		Repairing Naiko Hozzo of Naikampattam, Kallikot	100	
		Repairing Janijhoro of Namadolo, Kallikot.	100	
		Repairing Batti Ghayee of Vodoridi, Kallikot	100	
		Repairing Karadabodi Ghayee of Bikkapada, Kallikot	200	
		Repairing Sadi Hatya Ghayee of Khojapalli, Kallikot	200	
		Repairing Hozzo bondho of Rapapada, Kallikot	100	
		Repairing Ranibondho of Pasi Nowgam, Kallikot	100	
		Repairing Papa bondho of Bejjipetto, Kallikot	100	
			5000	

Brought forward ____ A. 400 | 13500

List of Works in [illegible]

List of Works [illegible] Wards proposed to be [illegible] Dept. during 1892-9[illegible] Works [illegible] the Court [illegible] to be laid before the [illegible] ...d)

[illegible] Works to be carried out by the Court [illegible] Dept. during 1892-93 [illegible] ...ed)

26-2-92

Estates under the [illegible] to be carried out by the Court [illegible] ...s — (continued)

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
			50-00	
Kallikot and Atagada (cont'd)	Repairs, Irrigation	Repairing Kokkidia bondho of Kondigam, Kallikot.	100	
		Repairing Kommari bondho of Koirasy, Kallikot	100	
		Repairing Vustala Manda of Koirasy, Kallikot	100	
		Repairing Hosso bondho of Bhalyaghora, Kallikot	100	
		Repairing Sasipana bondho of Sondamallo, Kallikot	100	
		Repairing Nuwa Angulo of Sondamallo, Kallikot	100	
		Repairing Paludowa Ghayee of Mahaswarapuram, Kallikot	100	
		Repairing Kobi bondho of Mahaswarapuram, Kallikot	100	
		Repairing Dosa bondho Nogi of Sabilia, Kallikot	100	
		Repairing Vosonodhipa of Sakuda, Kallikot	100	
		Repairing Bodo Angulo of Gongapur, Atagada	700	
		Closing breaches of Bamsa mandally Nalla of the Donnai river in Gongapar, Atagada	500	
		Repairing Dhollakatia of Machaycc near the Rushikulya river, Atagada	300	
		Closing breaches of the left flood bank of the Bhagua river Balasoro, Atagada	100	7600
		Closing breaches of the right flood bank of the Donnai river in the Botida village, Atagada	500	
		Closing breaches to Soro Ghayee of Baliapally, Atagada	200	
		Closing breaches in Kora Ghaya of Pothara, Atagada	500	
		Closing breaches in Vasandhara Ghayee of Sundrapada, Atagada	200	
		Closing breaches in the banks of Ballamaru tank of Konida, Atagada	500	
		Closing breaches in Jatikabody Boda bondho, Atagada	200	
		Repairing the flood bank of the Donnai river in Balasoro, Atagada	1,000	
		Closing breaches in the flood bank of the Donnai river in Bodochodiapada village, Atagada	300	11000
		Total, Repairs, Irrigation		15000
Dharakot	Buildings, Repairs	Repairs to thatched houses in Dharakot palace	500	
		Repairs to tiled houses in Dharakot palace	500	1000
Bodogodo	...	Repairs to thatched houses in Bodogodo palace	500	500
Aska	...	Repairs to Mahukdar's quarters at Aska	500	500

P.W. Dept

No 1021 C of 26-2-92

} Madras.

NUE.

Memo

The undersigned has the honor to forward the accompanying list of works in estates under the Court of Wards proposed to be carried out by the P.W. Deptt during 1892-93 (fasli 1302) and to request that, if Approved, a sum of Rs. 38,868. as shown in the margin, may be placed at the disposal of the C.W. Deptt

2. No provision has been made for works in the undermentioned estates for the reasons noted against each:—

Chakipalley and Chidikada estates } — It is reported that such works as are needed have already been put in hand in the current year and that no allotment of funds is required for 1892-93.

Jarada estate — The Collector of Ganjam states that the estate is already in debt and that Special application for funds will, if necessary, be made next year for any urgent work that may be required.

Works ——— Rs. 31,600

Establishment at 23 per cent } ——— 7268

Total Rs. 38,868

To

The Secretary, Court of Wards with copies of 2 Statements through the Revenue Dept.

List of Works in the Court of Wards Estates for 1892-93

Name of estate	Heads	Name of Works	Details of lump sums applied for 1892-93	Total
Kallikot and Atagada	Buildings, Repairs	Repairing the Santhomeka in Kallikot palace	1,000	
		Repairing the buildings in Nirmalajoreanam Kallikot	1,000	
		Repairing Panchabokara outhouses at Boirany	300	
		Repairs to outhouses to the Zemindar's house next to Boirany Cutcherry	200	2,500
		Total Buildings, Repairs		4500
Kallikot and Atagada	Communications, Repairs	Maintaining Haridamalo road and its branches, Kallikot	250	
		Maintaining town roads, Kallikot	150	
		Maintaining Sankaraswara Swamy's road, Kallikot	100	500
		Total, Communications, Repairs		500
		Grand Total, Ganjam Dn.		30500
		Godavari Western Division		
Lakkavaram	Irrigation, Original Works	Reconstructing masonry Sluices of Kongora tank at Guravoyagudem	1,100	1100
		Total, Godavari Western Dn.		1100
		Grand Total		31,600

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of Works

Thos Mch

1053 c dy 24-2-91
1067 wdy 17-4-91

B.

No 1021 c dy 26-2-92

9/13

P. W. CURRENT No. 14461

From

The Supt Engineer
2nd Circle

To

The Chief Engineer,
P.W. Department
Madras

dated 27th October 1891

Recd: 30-10-91

Budget Estimate for works in the Estates under Court of Wards for 1892-93.

Nil

There are no such works in this Circle.

J Hammon
B
Supt Engineer
2nd Circle

To.

P W 8/c
7415/91

No. 2507 W 18/9/91

Contract in the petitioners name, that
should be paid for the work turned out till
then by the petitioner after the measurement
thereof in the presence of the petitioner if the
Contract was to be cancelled, and that in
default of Compliance with the said request,
the said Office should be responsible to the
petitioner for any loss incurred thereby and
that in spite of the said letter having been
written the work turned out by the petitioner
was measured in his absence and the Contract
was given to other Contractors.

11. That then the petitioner submitted
to Colonel I. Pennycuick R.E., Superintending
Engineer, Periyar Project, a petition per post
[illegible]

3

on Account of the above Office Memorandum
dt. 8.7.1920. sent to the above Authority
Madras, Fort St. George dated 3rd/4th May
in Form of Petition and Bill on Stamp
the amount of the Account due on Third Item
and the petitioner in default to receive Item Second
the Remaining sum in accordance with the
Contract Item above.

That thereafter the petitioner
Contractor - upon the said Contract - and in
accordance with the terms of the Contract
Commenced the work and the Superintending
Engineer [illegible] and sent a letter
to the petitioner [illegible] to be sent to
the petitioner [illegible]

[illegible]

Madras June 1891

To,

The Superintending Engineer
Periyar Project

The humble petition of Yarla Gedda Naidu of Madras most respectfully —

Sheweth,

That your petitioner is a member of a firm of merchants, Capitalists, and Contractors who carry on business in Madras, Kristna and other districts.

2. That at the solicitations of the late S. Shunmuga Mudali, Masonry Works Contractor No 2 Periyar Division, he entered into an Agreement with him to supply the necessary Capital for Carrying on the Masonry works in the first reach No II Periyar Division.

3. That in pursuance of the above Agreement, your petitioners firm had been advancing to the said Shunmuga Mudali no less than Rs 12000/- from the 22 September 1888 to 30 July 1889 to carry on the said work.

4. That the said Shunmuga Mudali was misconducting himself by not remitting to your petitioners firm all monies realised on Cheques issued by the department for works done and by not submitting Accounts as he was bound to do.

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do under the terms of the said Agreement.

5. That after Considerable delay and difficulty your petitioner succeeded in getting Certain Accounts from the said Shunmuga Mudali.

6. That on Examining the said Accounts your petitioner found that the said Shunmuga Mudali spent Considerable sums of money on his own private [illegible] friends [illegible] monies to your petitioner filed Civil Suit No 24 of 1889 in the Madura Subordinate Judge's Court (West) against the said Shunmuga Mudali & others for the recovery of the same, attached some furniture &c belonging to the said Shunmuga Mudali before Judgment in said suit and handed over the same to the Custody of the Court.

7. That thereupon the said Shunmuga Mudali, with a view to Compromise the differences under reference between him and the petitioner as desired by the then Executive Engineer and the Sub-Divisional Office, gave the petitioner a list of the outstandings due to him up to July/89 from the Public Works Department, Periyar Project, with reference to Contracts in the said Department undertaken by him as per Schedule hereto Annexed, and also wrote a letter of the 5th August/89 to the then Executive Engineer, Periyar Project, asking him to remit to the petitioner whatever sums of money were due to him from the department up to the said date and also to transfer to the petitioner and in his name, the Contract with the department under reference that was settled then in the name of himself viz: Shunmuga Mudali and that thereupon the said Executive Engineer replied under date 7th August 1889 No 636 C to the said Shunmuga Mudali that he had [illegible] with his request.

8. That thereupon the petitioner was executing some Contract works in the same project from 10th August 1889 up to 20th Nov: /89 laying out his own money for the same and prepared bills for Rs 2796-1-9 due for work done up to 30th Septr /89 approved of by the then Sub-Divisional Officer Abdul Latef Sahib Superviser, II Periyar Division, for the said work done and materials supplied to the department and filed the said bills in the Executive Engineers Office.

9. That the work turned out since 1st October 1889 was not measured, and that meanwhile the then Executive Engineer sent the petitioner a Copy of a letter from the Superintending Engineer to the effect that the petitioner should be paid for the work done up to 20th November 1889 after measuring the same.

10. That thereafter the petitioner wrote to the then Executive Engineer letters under dates 13th & 25th November 1889 to the effect that it was not proper to Cancel the Contract

Mudali upto 30th July 1889 - Periyar Project - III Division -

To Construction of head sluice & supply of materials	8280	15	8			
By Amount of Cheque on Account	7280	15	8	1000	-	-
To Construction of Tunnel 2½ miles & supply of material	2807	6	5			
By Amount of Cheque on Account	2314	3	3	493	3	2
To Construction of Bridge at 7th Mile & materials	5094	7	5			
By Cheque on Account	4210	-	-	884	7	5
To Construction of fall & bridge & supply of materials	4384	14	-			
By Cheque on Account	3930	-	-	454	14	-
To Construction of tunnel at 6th mile & materials	2583	13	4			
By Cheque on Account	2203	5	3	380	8	1
To supply of material for Construction at 3rd Mile	680	-	-			
By Cheque on Account	500	-	-	180	-	-
To supply of materials for Construction of Regulating Sluice				1671	-	-
To Amount pid Two Govt Promote deposited				2000	-	-
" Cash deposited				100	-	-
				7164	-	-

Schedule No II

Amount due to Petitioner for work done between 3 August & 20 Nov 89.

To Construction of fall & bridge & materials						
" -do- of Culverts & -do-	820	6	1			
" Earth work	279	8	11			
" Materials for Construction of Regulating sluice	53	8	4			
" Construction of head sluice & materials supplied	483	4	-			
" -do- tunnel 6th mile & materials supplied	779	6	5			
" Unmeasured work done from 30 Sept to 20 Nov 89 - Grant	380	-	-	2796	1	9
				4200	-	-
			Rupees	13160	2	5

/True Copy/

(Sd) Illegible D Collector

(Sd) Varla Gedda Naidu

Govt. of {1892} Madras.

REVENUE.

Issued

Recd. Encl.

G.O., 6th April 1892, No. 337.

APRIL.

Famine, Kurnool.

Passing orders on the Collector's report under section 35 of the Famine Code regarding the state of the season in the district, submitted by the Board of Revenue.

Order thereon No. 1238 W
dy 14 April 92

communicated
to the Supdg. Engineer
III circle.

(True Extract)
(sd) J. Pennycuick
Col. R.E.
Secretary to Govt P.W.D.

To.
The S.E. III circle
" Sch. Engr Gordungen.

pw 8/
741 s/91

will be unnecessary, though it may be found advisable to continue expenditure on a few works carried out under ordinary rules. Even in the Cumbum and Márkápur taluks the cultivation accounts show that nearly 60 per cent. of the whole year's crop is sown before the middle of August, and these accounts are notoriously behind the actuals. It is not, therefore, he considers, necessary to estimate for more than four months' continuance of relief at present, and, allowing for an average of 25,000 persons at current prices, a sum of Rs. 2,50,000 for expenditure on wages should suffice, to which an addition of about 10 per cent. must be made for petty supervision.

4. The Collector submits lists of works which he has selected as suitable for relief, of which the following is an abstract:—

Taluks.	Irrigation works.		New roads.	Road repairs.	Total allotment applied for.
	Number.	Estimate.	Cost.	Cost.	
		Rs.	Rs.	Rs.	Rs.
Pattikonda	3	500	37,000	..	37,500
Rámallakót	5	18,120	..	15,000	33,120
Nandikótkur	1	14,250	..	12,000	26,250
Nandyál	6	19,826	..	..	19,826
Koilkuntla	10	22,250	87,975	..	1,10,225
Sirvel	13	8,036	..	..	8,036
Cumbum	18	75,485	85,800	50,000	2,11,285
Márkápur	24	61,217	85,285	1,10,000	2,56,502
Total ..	80	2,19,684	2,96,060	1,87,000	6,46,744

In the Rámallakót taluk, the repairs of the Veldurti tank costing Rs. 8,300 and in the Nandikótkur taluk those of the two tanks in Ramapuram costing Rs. 14,250 have already been provided for in the Public Works Department budgets. Deducting these sums, the Commissioner requests that sanction may be accorded for carrying out the remaining irrigation works mentioned by the Collector, the estimates and plans being first approved by the Public Works Department, by whom the irrigation works will be carried out, as required. Regarding the road works, the Commissioner considers that they should be confined as far as possible to the breaking and stacking of metal along the lines of existing roads. He would, however, make exceptions in the case of the following if the Collector finds it absolutely necessary to open them:—

Pattikonda ... ... Road from Kodumur to Gonegundla frontier.
Koilkuntla ... ... „ from Owk to Koilkuntla.
Márkápur ... ... „ from Dupad, northwards.

5. The Collector will be requested to submit a statement showing all the irrigation works in each taluk, on which money can be usefully spent, showing at the same time any expenditure incurred on them during the last five years and the average revenue obtained from each during the same period. It seems quite possible that more funds might be usefully spent on the repair or improvement of these works.

6. The Collector also estimates that it will be necessary to relieve an average of 3,650 persons gratuitously in kitchens for varying periods. This estimate of number may be accepted, but the period during which this form of relief will be necessary may, the Commissioner considers, be reduced to four months and the allotment applied for (Rs. 58,200) to Rs. 20,000.

7. The Collector further estimates that he may be able to advance Rs. 61,000 for well-sinking, but the Commissioner considers that, if the local officers bestir themselves in the matter, it should be possible not only to do a good deal in the Rámallakót, Nandikótkur, and Sirvel taluks, for which the Collector makes no provision, but to advance larger sums than he estimates for in the remaining taluks. Márkápur, Cumbum, and parts of Sirvel are well favored for well-sinking, as also are some parts of the remaining taluks and no effort should be spared in any taluk to push forward this most valuable work.

8. Similarly, the Collector's provision of Rs. 4,000 in the Pattikonda taluk only for loans under the Agriculturists' Loans Act appears to be inadequate, especially as the losses of stock may probably be very large.

9. The Collector further alludes to the special establishments required and the period for which they will be wanted. They are—

1 Special Assistant Collector for 6 months ... ... Already appointed.
2 Deputy Collectors ... „ 6 „ ... ... One do.
4 „ Tahsildars ... { 2 „ 10 „ / 2 „ 4 „ } ... ... Already appointed. For Pattikonda and Koilkuntla.
1 Special Engineer ... „ 4 „ ... ... To supervise the Pyápali division.

The Commissioner recommends that the appointment of two Deputy Tahsildars for Pattikonda and Koilkuntla may be sanctioned, but does not consider that another extra Deputy Collector is at present required. As the special Engineer already recommended for the Cumbum division has been appointed, he does not think it will be necessary to appoint another for the present in the Pyápali division.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
„ Collector of Kurnool.

Copy to the Government of India, Revenue and Agricultural Department.

Order—dated 6th April 1892, No. 337, Revenue.

Miscellaneous.

The Government concurs in the Commissioner's remarks in paragraphs 3, 6 and 7 of his Proceedings read above.

2. The proposals in paragraph 4 of the Proceedings are approved.

3. The appointment of two Special Deputy Tahsildars on Rs. 70 each *per mensem*, for the two taluks of Pattikonda and Koilkuntla, for a period of four months, is approved. The necessary proposition statement should be submitted at an early date.

4. The application for funds in paragraphs 3 and 6 of the Proceedings will be considered in the Financial Department.

5. As regards the additional Engineer applied for by the Collector, the Government agrees with the Board of Revenue in considering that one is not at present required for the Pyápali division.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture.
„ the Financial Department.
„ the Public Works Department.
„ the Local and Municipal Department.

Copy to the Commissioners of Land Revenue.

Exd. C. M. Brisson.

100 Copies.

List of works referred to in columns 7 to 12 of statement A—*cont.*

Taluk.	Name and cost of work proposed to be executed.	
	Name of work.	Amount.
1	2	3
	(c) *Minor Irrigation works*—cont.	Rs.
Márkápur taluk	(3) Repairs of Kankanalapalli tank	1,000
	(4) Do. of Tippayapalem tank	190
	(5) Do. of Mallenpeta tank	1,584
	(6) Do. of Balijapalli tank	1,948
	(7) Do. of Bupatipalli tank	260
	(8) Do. of Chapalmadugu tank	1,200
	(9) Do. of Narasiahpallem tank	75
	(10) Do. of Medapi tank	540
	(11) Do. of Annagari cherum	770
	(12) Do. of Bakkareddi tank of Rachakonda	200
	(13) Do. of Kankanalapalli tank..	100
	(14) Do. of Dammavari gulla tank	150
	(15) Do. of Gurrapusala tank	8,000
	(16) Do. of Karollu tank	200
	(17) Removing silt from Chennakeswaraswam Koneri, Márkápur ..	1,000
	Total ..	21,217
	Grand Total ..	2,58,502
	Grand Total of all taluks ..	6,54,744

Resolution—dated 21st March 1892, No. 218.

The Collector's report will be submitted for the orders of Government.

2. The areas in Kurnool which have suffered more or less severely from the failure of the usual rains during the past season and in which distress is being felt are as follows:—

Pattikonda taluk, four villages on or adjoining the Yerramala plateau on the south-east of the taluk, close to the affected area in Tadpatri and Koilkuntla; nine villages situated on the border of the taluk immediately south of Pattikonda, adjoining the affected area in Alur; and about twenty villages at the northern extremity of the taluk near Kodumur and Bellagal, adjoining the affected area in Adóni. These villages have an area of about 300 square miles and a population of 40,742, 2,500 of whom are expected on the average to need relief on works and 500 in kitchens up to the end of June.

Ramallakot taluk, twenty villages on the western side of the taluk with an area of 128 square miles, and in this area the Collector estimates that 1,500 persons will need employment on relief works for six months and that 150 may have to be fed in kitchens for four.

Nandikotkur taluk, fared better than the rest of the district, and it is only in 16 villages situated about the centre of the taluk and adjoining the affected villages on the north-west border of Nandyal that are at all affected, the taluk generally having had excellent early and late crops, the Kurnool-Cuddapah canal having supplemented the local deficiency of the rainfall in a good many villages. The Collector does not anticipate that many coolies will resort to relief works in the taluk till April or May, when 1,000 may have to be provided for in addition to those already employed by the Public Works Department on two large tank works, both of which, however, are situated at a considerable distance from the affected area. The Collector has already opened a road work near the village of Nandikotkur.

Nandyal taluk, nine villages situated west and north of Nandyal town, two villages on the extreme south, seven villages on the north-west and ten villages on the eastern border of the taluk close to the Nallamalas. The Collector estimates that 1,750 persons may need relief in this taluk, 500 of whom would have to be fed in kitchens.

Koilkuntla taluk, according to the Divisional officer, nearly the whole of the Owk division and about 24 villages in the black cotton soil tract near Koilkuntla itself. The area affected is about 395 square miles with a population of about 52,000, of whom the Collector estimates 3,200 on the average will need relief on works for seven months, and about 500 have to be fed in kitchens for the same period.

Sirvel taluk fared well; the distressed area lies in the north-east corner of the taluk, where 9 villages are affected. In this taluk it is estimated, that only 500 persons may need relief on works.

Cumbum taluk, the area affected has already been reported and consists of nearly all the northern half of the taluk, in parts of which the failure of the supply of water in the great Cumbum tank has crippled the resources. In this taluk, the Divisional officer estimates that 5,000 persons may need relief on works and 500 at kitchens for nine months from January last.

Markapur taluk is the worst portion of the district and is affected throughout. In this taluk the Collector estimates that an average of 14,000 people will need relief on works and 1,500 at kitchens up to the end of November next.

3. The particulars given above may be abstracted as follows:—

Taluk.	Period during which relief required.	For relief on works.			For relief at kitchens.	
		Numbers.	Collector's estimate of cost.	Cost at current prices.	Numbers.	Collector's estimate of cost.
			Rs.	Rs.		Rs.
	4	2,500	37,500	23,438	500	4,000
	6	1,500	33,750	21,094	150	1,200
Pattikonda	4	1,500	22,500	14,063	..	..
Ramallakot	4	1,250	18,750	11,719	500	4,000
Nandikotkur	4	3,200	84,000	52,501	500	7,000
Nandyal	7	500	7,500	4,687	..	..
Koilkuntla	4	5,000	1,68,750	1,05,469	500	9,000
Sirvel..	9	14,000	5,77,500	3,60,944	1,500	33,000
Cumbum	11					
Markapur		29,450	9,50,250	5,93,915	3,650	58,200
Total ..	..					

The numbers which have resorted to relief works during the four weeks of February were as follows for each taluk in which works are now open:—

Taluks.	February.			
	6th.	13th.	20th.	27th.
Pattikonda	..	..	601	510
Rámallakót	1,036	577	846	738
Nandikotkur	206	519	685	568
Koilkuntla	..	28	792	887
Cumbum	2,762	5,417	6,967	7,040
Márkápur	6,192	6,179	6,546	7,299
Total ..	10,196	12,720	16,437	17,042

The average number for the whole district during February is thus about 14,100 or less than the Board's original estimate (Board's Proceedings, dated 21st January 1892, No. 44), and the Commissioner sees no reason for anticipating that the numbers are likely in succeeding months to rise much above the estimate given therein. The average number therefore that may have to be provided for during the four months, March to June, both inclusive is not likely to reach the Collector's figure. The Commissioner also considers that, should the next south-west monsoon rains fall in reasonable amount and begin at the usual time—the end of May—the continuance of relief operations after the end of June

February	15,000
March	20,000
April	25,000
May	25,000
June	15,000

will be unnecessary, though it may be found advisable to continue expenditure on a few works carried out under ordinary rules. Even in the Cumbum and Márkápur taluks the cultivation accounts show that nearly 60 per cent. of the whole year's crop is sown before the middle of August, and these accounts are notoriously behind the actuals. It is not, therefore, he considers, necessary to estimate for more than four months' continuance of relief at present, and, allowing for an average of 25,000 persons at current prices, a sum of Rs. 2,50,000 for expenditure on wages should suffice, to which an addition of about 10 per cent. must be made for petty supervision.

4. The Collector submits lists of works which he has selected as suitable for relief, of which the following is an abstract :—

Taluks.	Irrigation works.		New roads.	Road repairs.	Total allotment applied for.
	Number.	Estimate.	Cost.	Cost.	
		Rs.	Rs.	Rs.	Rs.
Pattikonda	3	500	37,000	..	37,500
Rámallakót	5	18,120	..	15,000	33,120
Nandikótkur	1	14,250	..	12,000	26,250
Nandyál	6	19,826	..	..	19,826
Koilkuntla	10	22,250	87,975	..	1,10,225
Sirvel	13	8,036	..	..	8,036
Cumbum	18	75,485	85,800	50,000	2,11,285
Márkápur	24	61,217	85,285	1,10,000	2,56,502
Total ..	80	2,19,684	2,96,060	1,87,000	6,46,744

In the Rámallakót taluk, the repairs of the Veldurti tank costing Rs. 8,300 and in the Nandikótkur taluk those of the two tanks in Ramapuram costing Rs. 14,250 have already been provided for in the Public Works Department budgets. Deducting these sums, the Commissioner requests that sanction may be accorded for carrying out the remaining irrigation works mentioned by the Collector, the estimates and plans being first approved by the Public Works Department, by whom the irrigation works will be carried out, as required. Regarding the road works, the Commissioner considers that they should be confined as far as possible to the breaking and stacking of metal along the lines of existing roads. He would, however, make exceptions in the case of the following if the Collector finds it absolutely necessary to open them :—

Pattikonda	Road from Kodumur to Gonegundla frontier.
Koilkuntla	„ from Owk to Koilkuntla.
Márkápur	„ from Dupad, northwards.

5. The Collector will be requested to submit a statement showing all the irrigation works in each taluk, on which money can be usefully spent, showing at the same time any expenditure incurred on them during the last five years and the average revenue obtained from each during the same period. It seems quite possible that more funds might be usefully spent on the repair or improvement of these works.

6. The Collector also estimates that it will be necessary to relieve an average of 3,650 persons gratuitously in kitchens for varying periods. This estimate of number may be accepted, but the period during which this form of relief will be necessary may, the Commissioner considers, be reduced to four months and the allotment applied for (Rs. 58,200) to Rs. 20,000.

7. The Collector further estimates that he may be able to advance Rs. 61,000 for well-sinking, but the Commissioner considers that, if the local officers bestir themselves in the matter, it should be possible not only to do a good deal in the Rámallakót, Nandikótkur, and Sirvel taluks, for which the Collector makes no provision, but to advance larger sums than he estimates for in the remaining taluks. Márkápur, Cumbum, and parts of Sirvel are well favored for well-sinking, as also are some parts of the remaining taluks and no effort should be spared in any taluk to push forward this most valuable work.

C.—LIST of works referred to in columns 7 to 12 of statement A.

Taluks.	Name and cost of work proposed to be executed.	
	Name of work.	Amount of estimate.
1	2	3
	(a) Public Works Department Works.	Rs.
Pattikónda	(1) Repairs of Pulacheruvu of Bellagallu	200
	(2) Do. of Peddacheruvu of Pattikónda	200
	(3) Do. of Nallacheruvu of Karivemula	100
	Total ..	500
	(b) Local Fund Road Works.	
	(1) Road from Kodumur to Gonigundla village frontier	15,000
	(2) Do. from Vobalapuram to Devarabanda	13,750
	(3) Do. from Maddikeru to Pattikónda	8,250
	Total ..	37,000
	Grand Total ..	37,500
	(a) Public Works.	
Rámallakót	(1) Repairs of Veldurti tank	8,300
	(2) Do. of Yerradoddi division	7,815
	Total ..	16,115
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Kurnool town	15,000
	(c) Minor Irrigation Works.	
	(1) Gúdúr tank	730
	(2) Do.	275
	(3) Tadakanapalli division	1,000
	Total ..	2,005
	Grand Total ..	33,120
	(a) Public Works Department Works.	
Nandikótkur taluk	(1) Repairs of Chinna and Peda Mallalamma tank	14,250
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Nandikótkur 19 miles	12,000
	Total ..	26,250
	(a) Minor Irrigation Works.	
Nandyál taluk	(1) Mitual Peddakunta repairs	2,000
	(2) Bilakalagudur tank repairs	7,000
	(3) Digging a channel from Vaddagandla Buga to Nallavagu	90
	(4) Repairing supply channel of Bandi Atmákur tank	480
	(5) Parmatur Peddakunta repairs	4,500
	(6) Bollavaram tank repairs	5,756
	Total ..	19,826
	(a) Public Works Department Works.	
Koilkuntla taluk	(1) Repairs to Owk tank	960
	(b) Local Fund Road Works.	
	(1) Road from Jaladurgam of Pattikónda taluk to Cherlopalli	40,975
	(2) Do. from Owk to Koilkuntla	47,000
	Total ..	87,975
	(c) Minor Irrigation Works.	
	(1) Repair of tank at Gullasengavaram	2,200
	(2) Do. of Boddammanur	190
	(3) Do. of Gullathurthi	900
	(4) Do. of Injedu	250
	(5) Do. of Kolimigundla	5,000
	(6) Do. of Mayalur	750
	(7) Do. of Hanumatgundem	1,500
	(8) Do. of Kalvatala	10,000
	(9) Do. of Tudumuladinne	500
	Total ..	21,290
	Grand Total ..	1,10,225

will be unnecessary, though it may be found advisable to continue expenditure on a few works carried out under ordinary rules. Even in the Cumbum and Márkápur taluks the cultivation accounts show that nearly 60 per cent. of the whole year's crop is sown before the middle of August, and these accounts are notoriously behind the actuals. It is not, therefore, he considers, necessary to estimate for more than four months' continuance of relief at present, and, allowing for an average of 25,000 persons at current prices, a sum of Rs. 2,50,000 for expenditure on wages should suffice, to which an addition of about 10 per cent. must be made for petty supervision.

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6. The Collector also estimates that it will be necessary to relieve an average of 3,650 persons gratuitously in kitchens for varying periods. This estimate of number may be accepted, but the period during which this form of relief will be necessary may, the Commissioner considers, be reduced to four months and the allotment applied for (Rs. 58,200) to Rs. 20,000.

7. The Collector further estimates that he may be able to advance Rs. 61,000 for well-sinking, but the Commissioner considers that, if the local officers bestir themselves in the matter, it should be possible not only to do a good deal in the Rámallakót, Nandikótkur, and Sirvel taluks, for which the Collector makes no provision, but to advance larger sums than he estimates for in the remaining taluks. Márkápur, Cumbum, and parts of Sirvel are well favored for well-sinking, as also are some parts of the remaining taluks and no effort should be spared in any taluk to push forward this most valuable work.

accessible to trade. The probable number that will need relief is about 1,750, of which about 1,250 represents the numbers that will work and earn their livelihood, and the remaining 500 will have to be fed gratuitously. Calculating at the rate of 2 annas per diem on the average for each cooly that comes upon the works, the amount for 1,250 coolies for a period of 4 months comes to Rs. 18,750 and to make provision for this, I recommend that the works as per list C may be ordered to be taken on hand, whenever the need for the same arises.

11. With regard to gratuitous relief, the cost of feeding 500 persons at the rate of, say, one anna a day or 2 rupees per month for a period of 4 months, comes to Rs. 4,000. I may put down Rs. 5,000 as the allotment required under the Land Improvement Loans Act.

12. *Sirvél taluk.*—This is the second best-off taluks in this district. Its affected portion consists of the villages of (1) Mahadevapuram, (2) Boyal Kuntla, (3) Yallavattula, (4) Pedda Kumbalur, (5) Gangavaram, (6) Kotakonda, (7) Srirungapuram, (8) China Kambalur, and (9) Sirvél, lying about the north-east corner of the taluk. The crops in these villages have withered partially, but the rest of the taluk has fared very well and had on the average not less than an 8-anna crop everywhere, both wet and dry. The total harvest of food-grains, *i.e.*, rice, ragi, cholum and miscellaneous food-crops, such as sujja, arika and korra, are estimated to provide food for almost nearly 10 months and the balance of last year's stock is reported to be more than sufficient for about two months' consumption, so that the food-supply is amply sufficient for the next 12 months to come. Further, rice is imported on a small scale from Kistna and Cuddapah districts. With regard to accessibility to trade, the taluk is traversed by the Kurnool-Cuddapah road alongside the Kurnool-Cuddapah irrigation canal on the western side of the taluk, but there are no other roads nor are there any large towns, the largest in the taluk containing only from 2,000 to 3,000 inhabitants. Trade is not, therefore, very active generally, but the taluk lies not far off from the two important centres of trade, Nandyál on the one side, almost adjoining, and Cuddapah on the other, within a distance of some 36 miles. The Head Assistant Collector Mr. J. A. Cumming in whose charge this taluk lies is of opinion that no relief works on any extensive scale are necessary and that the provisions of the Famine Code need not be made applicable to this taluk, but, however, both according to his as well as the Tahsildar's estimate, the number of persons that may eventually turn out to be in need of relief approximates only 500, and to make provision for this number at the rate of 2 annas per diem for a period of 4 months, a sum Rs. 7,500 will be required. I would therefore propose the opening of the minor irrigation works mentioned in list C accompanying estimated to cost Rs. 8,036. No allotments under the Loans Acts or gratuitous relief are required for this taluk.

13. *Cumbum taluk.*—The area affected in this taluk is the whole of the Racherla Revenue Inspector's firka and a portion of the Cumbum Revenue Inspector's firka consisting of the villages of (1) Lanjakota, (2) Nadunpalle, (3) Arungabad, (4) Salakalavid, (5) Pitikayagundla, (6) Madana Pullalacheruvu, (7) Basivepalli, (8) Galijerugundla and (9) Konapalli on the east and about half a dozen villages on the north. The usual resources of this taluk are the local crops, but this year, owing to the failure of the monsoons, Guntúr and other large centres of trade have been drawn on for supply of food-grains. The failure of water in the Cumbum tank for raising second-crop cultivation has greatly crippled the resources of this taluk. However, according to my estimate, there is at present enough of food-supply for about a lakh of persons for a period of four months. The communications and means of transport into the interior of the taluk are generally defective, and owing to this to some extent, there is much slackness on the part of the local traders to import grain from outside, but the introduction of the Southern Mahratta Railway which passes through a portion of the affected area has considerably changed matters and even if the existing supply of food-grains should run short before the next harvest, there is every facility for timely replenishment by imports. As to the probable number of persons likely to come on relief works, the Divisional-officer estimates this at 5,000. Calculating at the rate of 2 annas per man per diem, the amount comes to Rs. 1,68,750 or Rs. 1,70,000 in round figures for nine months from January. To provide for this I

beg to propose the works as per list C. With regard to gratuitous relief, the Divisional-officer says that about 500 persons may require it. Allowing one anna per soul per diem or Rs. 2 per month, the charge for feeding 500 persons for nine months from January comes to Rs. 9,000.

14. The advantages of special well rules being appreciated in this taluk, I would ask for an allotment of Rs. 20,000 under the Land Improvement Loans Act.

15. *Márkápur taluk.*—This is worst of all, and the whole of this taluk is seriously affected. In ordinary years, the people here depend upon the ragi and cumbu crops raised under wells and other food-grains raised on dry lands. There is comparatively little wet cultivation in the taluk, so that the failure of the dry crops is naturally followed by scarcity and distress. This year, owing to the Southern Mahratta Railway running through it, it has been possible to import large quantities of cumbu, cholum and ragi from Guntúr, Narsaraopet and Kistna canal in the Kistna district. Thus, at the present moment, there is, in spite of the very bad harvest, no lack of food-grains and the present stock is estimated to provide food for about a lakh of people for two months. This taluk is particularly defective in point of communications and, therefore, trade is far from active in the interior; but the Railway has changed matters to some extent and when the existing stocks of food-grains are exhausted, there will not be any difficulty in early replenishing the same. As to the probable number requiring relief, the Divisional-officer estimates this at 14,000 persons and to provide this number for a period of 11 months from January last at an average of 2 annas per man per diem, the cost will come to Rs. 5,77, 500 or say Rs. 5,80,000 in round figures. To provide work for this amount, I beg to recommend works as per list C, amounting to Rs. 2,58,502, and proposals for the remaining amount will follow on receipt of information from the Deputy Collector. With regard to gratuitous relief I estimate the number requiring this at 1,500 on the average for 11 months. At the rate of one anna per man per diem or Rs. 2 per month, the cost comes to Rs. 33,000 in round figures. In this as well as in the Cumbum taluk, the period of continuance of distress has been calculated to extend till about October and November next, as these taluks mostly depend upon the later monsoons and agricultural labourers do not generally find enough of employment till then.

16. *Loans.*—As cultivation in this taluk largely depends upon wells, I would require an allotment of Rs. 25,000 under the Land Improvement Loans Act.

17. *Weavers.*—This class of labourers will form the subject of a separate report.

18. With regard to extra establishments, I beg to state that the following additional hands will be necessary:—

(1) Special Assistant Collector to aid the Collector—his salary, say Rs. 700 a month, for 6 months from March to August, Rs. 4,200.

(2) Two Deputy Collectors for Cumbum and Pyápali Divisions. Their salary, at Rs. 250 each for a month, for 6 months from March to August, Rs. 3,000.

(3) Four Special Deputy Tahsildars to aid the Tahsildars of Cumbum, Márkápur, Pattikonda and Koilkuntla at Rs. 70 each per mensem. The salary of the first two for 10 months from January to October being Rs. 1,400, and that of the latter two for 4 months from March to June being Rs. 560 or total Rs. 1,960.

(4) A special Public Works Department officer, say of the grade of Assistant Engineer, to supervise works in Pyápali Division. His salary Rs. 500 per mensem; for 4 months, Rs. 2,000.

(5) Establishments of the above-named officers, say Rs. 2,000, on the whole. The total amount that will be required under this head, therefore, comes to 4,200 + 3,000 + 1,960 + 2,000 + 2,000 = Rs. 13,160.

19. To sum up, my estimate for the whole district comes to Rs. 9,83,500 for works, Rs. 58,200 for gratuitous relief, and Rs. 65,000 for advances under the Loans Acts to landed classes and Rs 13,160 under extra establishment.

20. I beg to enclose statements (A) of forecast of outlay on works; (B) of allotments required under gratuitous relief and loans; (C) of works selected from the programme for execution.

A.—FORECAST of outlay on works proposed to be executed in the Kurnool district in the year 1892.

Taluks.	Population as per census of 1891.	Average number of persons who will probably require work.	Period for which numbers in column 3 require work.	Proportion of column 3 to column 2.	Cost of providing work for the numbers shown in column 3 at 2 annas per head per diem for the periods mentioned in column 4.
1	2	3	4	5	6
			MONTHS.		RS.
1. Pattikonda	138,787	2,500	4	1·80	37,500
2. Rámallakót	125,272	1,500	6	1·19	33,750
3. Nandikótkur	88,575	1,500	4	1·69	22,500
4. Nandyál	96,447	1,250	4	1·20	18,750
5. Koilkuntla	86,631	3,200	7	3·69	84,000
6. Sirvel	65,202	500	4	0·76	7,500
7. Cumbum	116,538	5,000	9	4 29	1,68,750
8. Márkápur	100,076	14,000	11	13·98	5,77,500
Total ..	817,528	29,450	6	3·60	9,50,250

Taluks.	Heads under which work is proposed to be provided and cost under each head.					Grand Total.	Allotment applied for.
	Public Works Department.	Minor Irrigation Works.	Local Funds.				
			Repair or construction of roads.	Village improvements and water supply.	Total.		
	7	8	9	10	11	12	13
	RS.	RS.	RS.		RS.	RS.	RS.
1. Pattikonda	500	..	37,000	..	37,000	37,500	37,500
2. Ramallakót	16,115	2,005	15,000	..	15,000	33,120	34,000
3. Nandikótkur	14,250	..	12,000	..	12,000	26,250	26,000
4. Nandyál	..	19,826	..	..	..	19,826	20,000
5. Koilkuntla	960	21,290	87,975	..	87,975	1,10,225	1,10,000
6. Sirvel	..	8,036	..	..	..	8,036	8,000
7. Cumbum	71,000	4,485	85,800	..	85,800	1,61,285	1,70,000
8. Márkápur	40,000	21,217	1,97,285	..	1,97,285	2,58,502	5,78,000
Total ..	1,42,825	76,859	4,35,060	..	4,35,060	6,54,744	9,83,500

B.—STATEMENT showing allotments recommended for gratuitous relief and advances under the Loans Acts in the Kurnool district in the year 1892.

Taluk.	Population as per census of 1891.	Probable average number requiring gratuitous relief.	Proportion of column 3 to column 2.	Period for which relief will be required.	Cost of relief at Rs. 2 per head per mensem for the period shown in column 5.	Allotment now applied for.	Allotments applied for under the Loans Act.			Total of columns 7 and 10.
							Under the Land Improvement Act.	Under the Agriculturists' Loans Act.	Total.	
1	2	3	4	5	6	7	8	9	10	11
				MTHS.	RS.	RS.	RS.	RS.	RS.	
1. Pattikonda ..	138,787	500	0·36	4	4,000	4,000	6,000	4,000	10,000	14,000
2. Rámallakót ..	125,272	150	0·11	4	1,200	1,200	..	..	..	1,200
3. Nandikótkur ..	88,575	..	..	..	..	..	..	..	..	..
4. Nandyál	96,447	500	0·51	4	4,000	4,000	5,000	..	5,000	9,000
5. Koilkuntla ..	86,631	500	0·57	7	7,000	7,000	5,000	..	5,000	12,000
6. Sirvel	65,202	..	..	..	..	..	..	..	..	..
7. Cumbum	116,538	500	0·42	9	9,000	9,000	20,000	..	20,000	29,000
8. Márkápur	100,076	1,500	1·49	11	33,000	33,000	25,000	..	25,000	58,000
Total ..	817,528	3,650	0·44	5	58,200	58,200	61,000	4,000	65,000	123,200

C.—LIST of works referred to in columns 7 to 12 of statement A.

Taluks.	Name and cost of work proposed to be executed.	
	Name of work.	Amount of estimate.
1	2	3
	(a) Public Works Department Works.	Rs.
Pattikónda	(1) Repairs of Pulacheruvu of Bellagallu	200
	(2) Do. of Peddacheruvu of Pattikónda	200
	(3) Do. of Nallacheruvu of Karivemula	100
	Total ..	500
	(b) Local Fund Road Works.	
	(1) Road from Kodumur to Gonigundla village frontier	15,000
	(2) Do. from Vobalapuram to Devarabanda	13,750
	(3) Do. from Maddikeru to Pattikónda	8,250
	Total ..	37,000
	Grand Total ..	37,500
	(a) Public Works.	
Rámallakót	(1) Repairs of Veldurti tank	8,300
	(2) Do. of Yerradoddi division	7,815
	Total ..	16,115
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Kurnool town	15,000
	(c) Minor Irrigation Works.	
	(1) Gúdúr tank	730
	(2) Do.	275
	(3) Tadakanapalli division	1,000
	Total ..	2,005
	Grand Total ..	33,120
	(a) Public Works Department Works.	
Nandikótkur taluk	(1) Repairs of Chinna and Peda Mallalamma tank	14,250
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Nandikótkur 19 miles	12,000
	Total ..	26,250
	(a) Minor Irrigation Works.	
Nandyál taluk	(1) Mitual Peddakunta repairs	2,000
	(2) Bilakalagudur tank repairs	7,000
	(3) Digging a channel from Vaddagandla Buga to Nallavagu	90
	(4) Repairing supply channel of Bandi Atmákur tank	480
	(5) Parmatur Peddakunta repairs	4,500
	(6) Bollavaram tank repairs	5,756
	Total ..	19,826
	(a) Public Works Department Works.	
Koilkuntla taluk	(1) Repairs to Owk tank	960
	(b) Local Fund Road Works.	
	(1) Road from Jaladurgam of Pattikónda taluk to Cherlopalli	40,975
	(2) Do. from Owk to Koilkuntla	47,000
	Total ..	87,975
	(c) Minor Irrigation Works.	
	(1) Repair of tank at Gullasengavaram	2,200
	(2) Do. of Boddammanur	190
	(3) Do. of Gullathurthi	900
	(4) Do. of Injedu	250
	(5) Do. of Kolimigundla	5,000
	(6) Do. of Mayalur	750
	(7) Do. of Hanumatgundem	1,500
	(8) Do. of Kalvatala	10,000
	(9) Do. of Tudumuladinne	500
	Total ..	21,290
	Grand Total ..	1,10,225

worst condition. According to the Deputy Collector, the affected portion of this taluk comprises 57 villages or nearly three-fourths of the taluk, made up of almost the Owk division and about two dozen villages in the black cotton tract of the cusba firka. The usual resources of this taluk are the local products, which in ordinary years are considerably exported; but this year, the harvest in all the red soils and in a few of the black soil villages was almost a complete failure and therefore the taluk has to depend somewhat on imports from without. Further, the taluk is also not very fortunate in point of communications. Excepting the Owk-Tadpatri high road which runs through a portion of the Owk firka, there is no high road of any importance. The western and southern portions of the Owk firka are hilly, the Yerramalai range passing through them, and the Banganapalli Nawab's territory intercepts the taluk totally from north to south. The affected tract extends over an area of 252,942 acres or about 395 square miles and contains a population of about 52,000. The Deputy Collector gives no estimate of the numbers likely to require relief, but the Tahsildar is of opinion that eventually about 6,000 persons may turn out to be in need of relief. According to his detailed estimate, I conclude that 3,200 persons on the average for 7 months from March will have to be provided for. This is somewhat above 5 per cent. of the population of the affected tract. I recently visited this taluk and saw some of the villages affected, and on my personal experience I find that the Tahsildar's estimate is not above the mark. I should, if anything, say below it. Calculating at the rate of 2 annas per man per diem on the average, the total charge for 3,200 persons for a period of 7 months comes to Rs. 84,000. Besides these, I find that some kitchens are necessary to provide food to persons incapable of work and children of those engaged on works. About 500 persons on an average for 7 months from March will have to be so provided for; and allowing at the rate of one anna per head per diem or Rs. 2 per mensem, the total charge for this number for 7 months amounts to Rs. 7,000.

9. With regard to works I propose the following—The construction of a road from Jaladurgam in the Pattikonda taluk to Cherlapalli in the Koilkuntla taluk over the Yerramalai plateau to meet the Banganapalli-Tadpatri road near Cherlapalli at a cost of Rs. 40,975 and another from Owk to Koilkuntla at a cost of Rs. 47,000. I think that these two works, besides the Minor Irrigation and Public Works Department works as per list C enclosed, will amply suffice for our present purposes. The taluk being generally defective in point of wells, I require an allotment of Rs. 5,000 under the Land Improvement Loans Act.

10. *Nandyál taluk.*—The affected portions of this taluk where crops have generally failed this year are—(1) Udumalpuram, (2) Togarchedu, (3) Kowlur, (4) Nerwada, (5) Panem, (6) Balapanur, (7) Pólúr, (8) Bhímavaram, (9) Pulimuddi (these comprise a small portion forming a circle with about a 10-mile radius about the west and north of the Nandyál town), (10) Kothur, (11) Gaggatur (two villages in the extreme south), (12) Gadivemula (a village in the extreme north), (13) Narayanapuram, (14) Galichennayapalem, (15) Anupur, (16) Gazulapalle, (17) Baswapuram, (18) Tammadapalli, (19) Bukkapuram, (20) Kadamalakalwa, (21) Rayamalpuram, (22) Masidpuram, (23) Ayalur, (24) Orvakallu, (25) Sekunala, (26) Tippayapalli, (27) Brahmanapalli, (28) Gani, (29) Chennakkapalli, (30) Santajutur, (31) Peddadevalapuram. The normal supply of food-grains produced in this taluk, including of course the affected portions, is amply sufficient for its wants and there is generally neither exportation nor importation on a large scale. Some merchants from Koilkuntla taluk sell cholum in Nandyál and an appreciable quantity of paddy is exported from Nandyál town by the merchants of Banganapalli territory. As this year's harvest is generally estimated at only four annas, it is evident that it largely falls short of the requirements of the year and will, together with the large stocks remaining from last year, I estimate, provide food only for about six months to come. The Southern Mahratta Railway passes right through the middle of the taluk from west to east and the worst affected portion partly touches the line on both sides. Further, the country round the affected portions is flat and traversed everywhere by easy bandy-tracks. Even apart from the affected parts and besides the Southern Mahratta Railway, there are the Banganapalle frontier road, the Atmakúr-Koilkuntla road and the Kurnool-Cuddapah road, which pass through the taluk, and it is all therefore, excepting that very small portion of it which touches the Nallamalais, easily

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 21st March 1892, No. 218:—

Mr. Clogstoun.

Read—the following letter from C. KOUGH, Esq., Collector of Kurnool, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 26th February 1892, No. 1444:—

I have the honour to submit the report called for in Board's Proceedings, Mis. No. 430, dated 13th ultimo, in detail for each taluk separately.

2. *Rámallakót taluk.*—This taluk is one of those in the district which have fared not particularly badly this year. The south-west monsoon was fair in this taluk except a few villages, and the north-west monsoon too was not a serious failure. The portion affected in this taluk lies on both sides of the Kurnool-Bellary road and extends to a distance of about 10 miles on each side and consists of the villages of (1) Peddapad, (2) Gudipad, (3) Parla, (4) Regadikanapuram, (5) Joharapuram, (6) Kurubanagalapuram, (7) Lanjapolur, (8) Dinnedevarapad, (9) Banditandrapad, (10) Amadaguntla, (11) Penchikalapad, (12) Budidepad, (13) Anugonda, (14) Pusalur, (15) Nayakallu, (16) Konganapad, (17) Gorantla, (18) Laddagiri, (19) Ayyavari-gokulapad, (20) Pandipad, (21) Salakapuram, (22) Mannegunta, and (23) Dupad. These villages cover an extent of about 128 square miles and both the monsoons almost entirely failed over this tract. The usual resources of this taluk, including of course the affected villages, are the local crops as well as the extensive imports made by the Kurnool merchants. The taluk is not hilly except very slightly on the eastern corner and is traversed by two high roads, one of which is the Kurnool-Gooty road running right through the middle of the taluk from the north to the south, the other, the Bellary road, passes through the affected tracts, whilst the Southern Mahratta Railway runs in the south of the taluk from west to east. All parts of the taluk are therefore freely accessible to trade from without.

3. Prices having gone beyond scarcity rates early in the month of November 1891 in Kurnool town, there was a great clamour among the poorer classes, the chief of which were Muhammadans, about want of work, and therefore, with the permission of the Board, I opened a Local Fund road work at about a distance of 3 miles from Kurnool. The expenditure incurred on this in November was Rs. 600 and in December Rs. 1,550. The number of coolies is generally from 300 to 500, but has never gone beyond 600 as yet. Taking, therefore, the average to represent about 500 persons and calculating at the rate of, say, 2 annas per man per diem, the monthly expenditure comes to Rs. 1,875, or, say, Rs. 1,900. The need for State aid, of course, depends on the success or failure of the next monsoon which will not be evident till about the end of June next. Granting, therefore, that the work should be continued till then, the amount for six months comes to about Rs. 12,000; and seeing that April and May will probably be the severest of the months, a much larger number of coolies may be then expected, and to make provision for these a sum of Rs. 3,000 may be put down. Besides the road work referred to above, the Public Works Department have commenced the repairs of the Veldurti tank, for which an allotment of Rs. 8,300 has been provided, and this work is reported to be sufficient to last for a period of six months for about 200 laborers. Judging from the weekly

Govt. of {1892} Madras.

REVENUE.

Issued

Recd. *Encl.*

G.O., 6th April 1892, No. 337.

APRIL.

Famine, Kurnool.

Passing orders on the Collector's report under section 35 of the Famine Code regarding the state of the season in the district, submitted by the Board of Revenue.

No. 1238 Way/14 April '92

Communicated to the Supdg. Engineer III circle

159 ovb

Do S.E. III circle

C.E. for I.

reports, I have reason to think that the number of coolies will come up to 2,000 in April and May or about 1,500 on an average for six months from January. Labour for these additional men can be provided in the repair of Erradodde tank, which has been put down in the district programme as requiring an outlay of Rs. 7,815, and in the minor irrigation works mentioned in list C appended; but of course best of all as a relief work for this taluk would be the railway from Dhone to Kurnool. Under these circumstances, I think that an allotment of Rs. 34,000 in round figures may be provided for this taluk. As to gratuitous relief, an experimental kitchen was opened at Kurnool town under the Board's orders to meet the cases of gosha women and others standing in need of relief, but nobody resorted to it. Later on perhaps it may be required. I may take 150 as the average figure for four months from March to June, and allowing 1 anna per man per diem or Rs. 2 per month, I think a sum of Rs. 1,200 will be the most that will be required under this head.

4. With regard to granting advances to landed classes, the Deputy Collector seems to lay great stress on this point and states that upwards of 200 applications have already been received. I think this is a matter in which the interests of Government are seriously concerned and should not be made a point to grant advances as a matter of course simply on the ground that innumerable applications are pouring in. The ryots of this taluk have not apparently as yet displayed any indications of having realized the advantages of State loans, and under such circumstances the usual allotments provided for the taluk will, I think, quite suffice.

5. *Nandikótkur taluk.*—This taluk is one of the two that have fared best in this district in spite of the adverse season, and the fact is simply due to there having been no appreciable failure in either of the monsoons and to the running of the Kurnool-Cuddapah irrigation canal through a large portion of the taluk. Excepting the marginally noted 16 villages, the first 3 of which are seriously affected, the whole taluk has had excellent crops both in the first and the second seasons. Rainfall, however, was not even throughout the taluk, but where its want was slightly felt, there was the canal to supplement it. Scarcity, therefore, has not yet been felt to any perceptible degree. Even the worst of the villages, excepting the seriously affected spot, had no less than 8-anna crop of all grains on the average. The usual resources of this taluk are the principal food-grains locally produced, and the produce of this year is amply sufficient for its requirements for a year. The country too, with the exception of about a dozen villages on the east bordering on the Nallamalais, is plain and easily passable for cart traffic. There is no railway, but the Kurnool-Bairluti High road passes through the centre of the taluk lengthwise from west to east and another road leads from Atmakúr southwards through Velgode to Nandyál frontier. The whole taluk is therefore easily accessible to operations of trade from all parts except the east. Even the affected portion lies on the southern side of the first mentioned road, so that when the food supply in these villages runs short, imports from outside can be made without difficulty. Local markets are therefore well supplied although the rates at which grain is sold are prohibitive to the poorer classes. With regard to the probable numbers needing relief, I beg to observe that for one month more agricultural operations will continue to absorb a considerable number of laborers, and it is only subsequent to this that there will arise serious demand for work. The Public Works Department have commenced the repairs of the Pedda and Chinna Mallalamma tanks of Ramapuram, for which a sum of Rs. 14,250 is provided. This work is estimated to afford labour for about 300 persons for a period of six months. Further, the Board will remember that in my No. 757, dated 28th ultimo, I estimated the probable expenditure of this taluk on relief operations at Rs. 12,000, and I mean to expend this amount on the work of breaking and stacking metal on the Kurnool-Bairluti road near Nandikótkur which I have, in anticipation of the Commissioner's approval, already sanctioned. No laborers have, however, yet chosen to come forward on account of the low wages they expect according to the task system, but in April I anticipate about 1,000 coolies will present themselves. On the whole, therefore, I am of opinion that the aggregate sum of these works, *i.e.*, Rs. 26,250, will be more than sufficient for this taluk, and I do not think I shall want any allotment under the head of kitchens or for any other purpose.

Seriously affected villages.

1. Devanur.	3. Talamudipi.
2. Jalakanar.	

Partially affected villages.

1. Paramanchala.	8. Midthur.
2. Timmapuram.	9. Sunkesula.
3. Rollapad.	10. Chintalapalli.
4. Cherukucherla.	11. Chowtkur.
5. Bhyrapuram.	12. Bannur (No. 49).
6. Vipanagundla.	13. Kadumur.
7. Tartur.	

6. With regard to loans, the usual allotment will suffice.

7. *Pattikonda taluk.*—This taluk is one of those in the district in which the south-west monsoon was a partial, and the north-east a total, failure. The taluk is almost equally divided between red and black soils. The former alone, which chiefly depend upon the first monsoon, had therefore a partial crop; but the latter, which mostly depend upon the north-east monsoon, have seriously suffered on account of its failure. The Deputy Collector states that the distress is general throughout the taluk, but keenly felt only in the affected portions; but I am inclined to think that it is confined only to the latter which comprises the villages of (1) Burugula, (2) Kommamarri, (3) Jakkasanikuntla, (4) Jaladurgam (red soil villages of the Pyápali Revenue Inspector's firka situated on and adjoining the Yerramalais plateau where the monsoons have particularly failed this year), (5) Devanabanda, (6) Hosur, (7) Puchikayalamada, (8) Buruzula, (9) Peravali, (10) Kancharadinne, (11) Maddikera Agraharam, (12) Maddikera, (13) Yadavali (all black cotton soil villages forming a portion of the Pattikonda firka), (14) Bellagal, and about a dozen black soil villages in its neighbourhood comprising a portion of the Gonegondla firka and Kodumur and about ten villages in its neighbourhood forming a portion of the Kapatralla Revenue Inspector's firka. These distressed tracts extend over an area of about 300 square miles in the aggregate. The failure of the monsoons has so seriously affected these villages that none of them has secured even so much as a 3-anna crop this year on the average. The later jonna, *i.e.*, white cholum, which grows chiefly on black cotton soils, has been a general failure, and cotton, which is also one of the chief products in these parts, is estimated to yield between 1 and 2 annas. The usual resources of this taluk are the local products, but the failure of harvests this season in these villages has necessitated large imports from Kistna, Sholapur and other large trade centres. Excepting the eastern portion of the Pyápali firka bordering on the Yerramalais, the rest of the taluk is all plain country and is traversed by 4 high roads, the Pyápali-Aspari road, the Rampur pass road, the Kurnool-Bellary road and the Kurnool-Gooty road. The Southern-Mahratta Railway also runs through the south of the taluk in an easterly direction. The taluk is therefore amply provided with free means of communication and is accessible to operations of trade from all parts. The population of the affected villages is 40,742 and about 2,500 persons are likely to come on relief list. Calculating at the rate of annas 2 per head per diem, the amount for four months from March to June comes to about Rs. 37,500. About 500 persons are expected to resort to kitchens for four months from March, and at 1 anna per head per diem, or Rs. 2 per mensem on an average, the estimated outlay on gratuitous relief comes to Rs. 4,000. Again, under the Loans Acts, the Deputy Collector applies for an allotment of Rs. 10,000, and considering the paucity of wells, the scarcity of fodder, and the applications already pending disposal apart from those still expected as distress goes on increasing, I am of opinion that the allotment applied for is not above the mark and may be therefore granted. On the whole, therefore, a sum of Rs. 51,500 will be quite sufficient for this taluk as far as present circumstances go. To provide for expenditure to be allotted for works, I propose the construction of three roads—one from Kodumur to Gonegondla village frontier at a cost of Rs. 15,000, another from Maddikera to Pattikonda, a distance of $12\frac{1}{2}$ miles, lying through pure black cotton soil and utterly impassable in the rainy season, at a cost of Rs. 8,250, and the third from Obalapuram to Devarabanda, a distance of about 25 miles, at a cost of Rs. 13,75[illegible] besides a few Public Works Department works on a small scale as per list C accompanying.

8. *Koilkuntla taluk.*—This taluk also is almost on a level with, if not worse than, its neighbour Pattikonda. It is chiefly comprised of black cotton soil depending on the later monsoon which was not particularly favorable this year though not exceptionally bad. The Owk Deputy Tahsildar's division, which consists of more than half the taluk, is mostly red soil which depends on the south-west monsoon which unfortunately failed almost entirely here, so that this portion of the taluk is in the

will be unnecessary, though it may be found advisable to continue expenditure on a few works carried out under ordinary rules. Even in the Cumbum and Márkápur taluks the cultivation accounts show that nearly 60 per cent. of the whole year's crop is sown before the middle of August, and these accounts are notoriously behind the actuals. It is not, therefore, he considers, necessary to estimate for more than four months' continuance of relief at present, and, allowing for an average of 25,000 persons at current prices, a sum of Rs. 2,50,000 for expenditure on wages should suffice, to which an addition of about 10 per cent. must be made for petty supervision.

4. The Collector submits lists of works which he has selected as suitable for relief, of which the following is an abstract :—

Taluks.	Irrigation works.		New roads.	Road repairs.	Total allotment applied for.
	Number.	Estimate.	Cost.	Cost.	
		Rs.	Rs.	Rs.	Rs.
Pattikonda	3	500	37,000	..	37,500
Rámallakót	5	18,120	..	15,000	33,120
Nandikótkur	1	14,250	..	12,000	26,250
Nandyál	6	19,826	..	..	19,826
Koilkuntla	10	22,250	87,975	..	1,10,225
Sirvel	13	8,036	..	..	8,036
Cumbum	18	75,485	85,800	50,000	2,11,285
Márkápur	24	61,217	85,285	1,10,000	2,56,502
Total ..	80	2,19,684	2,96,060	1,87,000	6,46,744

In the Rámallakót taluk, the repairs of the Veldurti tank costing Rs. 8,300 and in the Nandikótkur taluk those of the two tanks in Ramapuram costing Rs. 14,250 have already been provided for in the Public Works Department budgets. Deducting these sums, the Commissioner requests that sanction may be accorded for carrying out the remaining irrigation works mentioned by the Collector, the estimates and plans being first approved by the Public Works Department, by whom the irrigation works will be carried out, as required. Regarding the road works, the Commissioner considers that they should be confined as far as possible to the breaking and stacking of metal along the lines of existing roads. He would, however, make exceptions in the case of the following if the Collector finds it absolutely necessary to open them :—

Pattikonda ... ... Road from Kodumur to Gonegundla frontier.
Koilkuntla ... ... „ from Owk to Koilkuntla.
Márkápur ... ... „ from Dupad, northwards.

5. The Collector will be requested to submit a statement showing all the irrigation works in each taluk, on which money can be usefully spent, showing at the same time any expenditure incurred on them during the last five years and the average revenue obtained from each during the same period. It seems quite possible that more funds might be usefully spent on the repair or improvement of these works.

6. The Collector also estimates that it will be necessary to relieve an average of 3,650 persons gratuitously in kitchens for varying periods. This estimate of number may be accepted, but the period during which this form of relief will be necessary may, the Commissioner considers, be reduced to four months and the allotment applied for (Rs. 58,200) to Rs. 20,000.

7. The Collector further estimates that he may be able to advance Rs. 61,000 for well-sinking, but the Commissioner considers that, if the local officers bestir themselves in the matter, it should be possible not only to do a good deal in the Rámallakót, Nandikótkur, and Sirvel taluks, for which the Collector makes no provision, but to advance larger sums than he estimates for in the remaining taluks. Márkápur, Cumbum, and parts of Sirvel are well favored for well-sinking, as also are some parts of the remaining taluks and no effort should be spared in any taluk to push forward this most valuable work.

8. Similarly, the Collector's provision of Rs. 4,000 in the Pattikonda taluk only for loans under the Agriculturists' Loans Act appears to be inadequate, especially as the losses of stock may probably be very large.

9. The Collector further alludes to the special establishments required and the period for which they will be wanted. They are—

1 Special Assistant Collector for 6 months ... ... Already appointed.
2 Deputy Collectors ... „ 6 „ ... ... One do.
4 „ Tahsildars ... { 2 „ 10 „ ... ... Already appointed.
{ 2 „ 4 „ ... ... For Pattikonda and Koilkuntla.
1 Special Engineer ... „ 4 „ ... ... To supervise the Pyápali division.

The Commissioner recommends that the appointment of two Deputy Tahsildars for Pattikonda and Koilkuntla may be sanctioned, but does not consider that another extra Deputy Collector is at present required. As the special Engineer already recommended for the Cumbum division has been appointed, he does not think it will be necessary to appoint another for the present in the Pyápali division.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
„ Collector of Kurnool.
Copy to the Government of India, Revenue and Agricultural Department.

ORDER—dated 6th April 1892, No. 337, Revenue.

Miscellaneous.

The Government concurs in the Commissioner's remarks in paragraphs 3, 6 and 7 of his Proceedings read above.

2. The proposals in paragraph 4 of the Proceedings are approved.

3. The appointment of two Special Deputy Tahsildars on Rs. 70 each *per mensem*, for the two taluks of Pattikonda and Koilkuntla, for a period of four months, is approved. The necessary proposition statement should be submitted at an early date.

4. The application for funds in paragraphs 3 and 6 of the Proceedings will be considered in the Financial Department.

5. As regards the additional Engineer applied for by the Collector, the Government agrees with the Board of Revenue in considering that one is not at present required for the Pyápali division.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture.
„ the Financial Department.
„ the Public Works Department.
„ the Local and Municipal Department.
Copy to the Commissioners of Land Revenue.

Exd. C. M. Brisson.

100 Copies.

6th April 1892, No. 337, Revenue.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 21st March 1892, No. 218 :—

Mr. Clogstoun.

Read—the following letter from C. KOUGH, Esq., Collector of Kurnool, to the Secretary to the Commissioner of Revenue Settlement and Director of the Department of Land Records and Agriculture, dated 26th February 1892, No. 1444 :—

I have the honour to submit the report called for in Board's Proceedings, Mis. No. 430, dated 15th ultimo, in detail for each taluk separately.

2. *Rámallakót taluk.*—This taluk is one of those in the district which have fared not particularly badly this year. The south-west monsoon was fair in this taluk except a few villages, and the north-west monsoon too was not a serious failure. The portion affected in this taluk lies on both sides of the Kurnool-Bellary road and extends to a distance of about 10 miles on each side and consists of the villages of (1) Peddapad, (2) Gudipad, (3) Parla, (4) Regadikanapuram, (5) Joharapuram, (6) Kurubanagalapuram, (7) Lanjapolur, (8) Dinnedevarapad, (9) Banditandrapad, (10) Amadaguntla, (11) Penchikalapad, (12) Budidepad, (13) Anugonda, (14) Pusalur, (15) Nayakallu, (16) Konganapad, (17) Gorantla, (18) Laddagiri, (19) Ayyavarigokulapad, (20) Pandipad, (21) Salakapuram, (22) Mannegunta, and (23) Dupad. These villages cover an extent of about 128 square miles and both the monsoons almost entirely failed over this tract. The usual resources of this taluk, including of course the affected villages, are the local crops as well as the extensive imports made by the Kurnool merchants. The taluk is not hilly except very slightly on the eastern corner and is traversed by two high roads, one of which is the Kurnool-Gooty road running right through the middle of the taluk from the north to the south, the other, the Bellary road, passes through the affected tracts, whilst the Southern Mahratta Railway runs in the south of the taluk from west to east. All parts of the taluk are therefore freely accessible to trade from without.

3. Prices having gone beyond scarcity rates early in the month of November 1891 in Kurnool town, there was a great clamour among the poorer classes, the chief of which were Muhammadans, about want of work, and therefore, with the permission of the Board, I opened a Local Fund road work at about a distance of 3 miles from Kurnool. The expenditure incurred on this in November was Rs. 600 and in December Rs. 1,550. The number of coolies is generally from 300 to 500, but has never gone beyond 600 as yet. Taking, therefore, the average to represent about 500 persons and calculating at the rate of, say, 2 annas per man per diem, the monthly expenditure comes to Rs. 1,875, or, say, Rs. 1,900. The need for State aid, of course, depends on the success or failure of the next monsoon which will not be evident till about the end of June next. Granting, therefore, that the work should be continued till then, the amount for six months comes to about Rs. 12,000; and seeing that April and May will probably be the severest of the months, a much larger number of coolies may be then expected, and to make provision for these a sum of Rs. 3,000 may be put down. Besides the road work referred to above, the Public Works Department have commenced the repairs of the Veldurti tank, for which an allotment of Rs. 8,300 has been provided, and this work is reported to be sufficient to last for a period of six months for about 200 laborers. Judging from the weekly

To

H. E. The Right Hon'ble

BEILBY BARON WENLOCK, G.C.I.E.,

Governor and President in Council,

FORT ST. GEORGE,

May it Please Your Excellency,

We, the passed Engineer Students of the College of Engineering, most respectfully beg to bring to your Excellency's kind consideration the following *additional* facts in connection with our Memorial dated 9th January, 1892, now under consideration :—

1. The first Notification of the 20th January, 1886, sets forth "the number of appointments to be so awarded will be in proportion to the requirements of the service and will be fixed by the Chief Engineer. The number so determined will be announced annually at least 6 months before the final College Examination." It therefore follows that the number of appointments will be regulated by the probable number of vacancies in each year. Now with reference to the said vacancies only a *small portion* of them was to be filled up by departmental promotion (*vide* Original Notification) while according to the altered notification, the *major portion* of the vacancies was to be filled by departmental promotion and the remaining ones may or may not be reserved for the Engineer Students.

2. As a matter of fact there have been 8 vacancies in the Supervisor, 2nd Grade during the official year 1889-90 (the year in which we passed our final College Examination) as the accompanying list shows, but none of those 8 vacancies were published "6 months before the final College Examination" as the 1st Notification requires and not even a portion was reserved for us, as is done in the case of Engineer Subordinate Students with regard to the appointment of Overseers, 3rd Grade.

3. We further beg to state that after the introduction of the New Curriculum in January 7th, 1886, and after the publication of the 1st Notification in the *Gazette* there have been in all 26 vacancies in the Supervisor, 2nd Grade up to April 1891, as shown by the following list, and all these vacancies have been solely filled by departmental promotion, and not a single vacancy has been reserved for selection from the Engineer Students as the 1st Notification sets forth. As the vacancies that have occurred during the last 5 years have all thus been filled up without any reserve, we fear there may not be several vacancies now. Should such

reports, I have reason to think that the number of coolies will come up to 2,000 in April and May or about 1,500 on an average for six months from January. Labour for these additional men can be provided in the repair of Erradodde tank, which has been put down in the district programme as requiring an outlay of Rs. 7,815, and in the minor irrigation works mentioned in list C appended; but of course best of all as a relief work for this taluk would be the railway from Dhone to Kurnool. Under these circumstances, I think that an allotment of Rs. 34,000 in round figures may be provided for this taluk. As to gratuitous relief, an experimental kitchen was opened at Kurnool town under the Board's orders to meet the cases of gosha women and others standing in need of relief, but nobody resorted to it. Later on perhaps it may be required. I may take 150 as the average figure for four months from March to June, and allowing 1 anna per man per diem or Rs. 2 per month, I think a sum of Rs. 1,200 will be the most that will be required under this head.

4. With regard to granting advances to landed classes, the Deputy Collector seems to lay great stress on this point and states that upwards of 200 applications have already been received. I think this is a matter in which the interests of Government are seriously concerned and should not be made a point to grant advances as a matter of course simply on the ground that innumerable applications are pouring in. The ryots of this taluk have not apparently as yet displayed any indications of having realized the advantages of State loans, and under such circumstances the usual allotments provided for the taluk will, I think, quite suffice.

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7. *Pattikonda taluk.*—This taluk is one of those in the district in which the south-west monsoon was a partial, and the north-east a total, failure. The taluk is almost equally divided between red and black soils. The former alone, which chiefly depend upon the first monsoon, had therefore a partial crop; but the latter, which mostly depend upon the north-east monsoon, have seriously suffered on account of its failure. The Deputy Collector states that the distress is general throughout the taluk, but keenly felt only in the affected portions; but I am inclined to think that it is confined only to the latter which comprises the villages of (1) Burugula, (2) Kommamarri, (3) Jakkasanikuntla, (4) Jaladurgam (red soil villages of the Pyápali Revenue Inspector's firka situated on and adjoining the Yerramalais plateau where the monsoons have particularly failed this year), (5) Devanabanda, (6) Hosur, (7) Puchikayalamada, (8) Buruzula, (9) Peravali, (10) Kancharadinne, (11) Maddikera Agraharam, (12) Maddikera, (13) Yadavali (all black cotton soil villages forming a portion of the Pattikonda firka), (14) Bellagal, and about a dozen black soil villages in its neighbourhood comprising a portion of the Gonegondla firka and Kodumur and about ten villages in its neighbourhood forming a portion of the Kapatralla Revenue Inspector's firka. These distressed tracts extend over an area of about 300 square miles in the aggregate. The failure of the monsoons has so seriously affected these villages that none of them has secured even so much as a 3-anna crop this year on the average. The later jonna, *i.e.*, white cholum, which grows chiefly on black cotton soils, has been a general failure, and cotton, which is also one of the chief products in these parts, is estimated to yield between 1 and 2 annas. The usual resources of this taluk are the local products, but the failure of harvests this season in these villages has necessitated large imports from Kistna, Sholapur and other large trade centres. Excepting the eastern portion of the Pyápali firka bordering on the Yerramalais, the rest of the taluk is all plain country and is traversed by 4 high roads, the Pyápali-Aspari road, the Rampur pass road, the Kurnool-Bellary road and the Kurnool-Gooty road. The Southern-Mahratta Railway also runs through the south of the taluk in an easterly direction. The taluk is therefore amply provided with free means of communication and is accessible to operations of trade from all parts. The population of the affected villages is 40,742 and about 2,500 persons are likely to come on relief list. Calculating at the rate of annas 2 per head per diem, the amount for four months from March to June comes to about Rs. 37,500. About 500 persons are expected to resort to kitchens for four months from March, and at 1 anna per head per diem, or Rs. 2 per mensem on an average, the estimated outlay on gratuitous relief comes to Rs. 4,000. Again, under the Loans Acts, the Deputy Collector applies for an allotment of Rs. 10,000, and considering the paucity of wells, the scarcity of fodder, and the applications already pending disposal apart from those still expected as distress goes on increasing, I am of opinion that the allotment applied for is not above the mark and may be therefore granted. On the whole, therefore, a sum of Rs. 51,500 will be quite sufficient for this taluk as far as present circumstances go. To provide for expenditure to be allotted for works, I propose the construction of three roads—one from Kodumur to Gonegondla village frontier at a cost of Rs. 15,000, another from Maddikera to Pattikonda, a distance of 12½ miles, lying through pure black cotton soil and utterly impassable in the rainy season, at a cost of Rs 8,250, and the third from Obalapuram to Devarabanda, a distance of about 25 miles, at a cost of Rs. 13,750 besides a few Public Works Department works on a small scale as per list C accompanying.

8. *Koilkuntla taluk.*—This taluk also is almost on a level with, if not worse than, its neighbour Pattikonda. It is chiefly comprised of black cotton soil depending on the later monsoon which was not particularly favorable this year though not exceptionally bad. The Owk Deputy Tahsildar's division, which consists of more than half the taluk, is mostly red soil which depends on the south-west monsoon which unfortunately failed almost entirely here, so that this portion of the taluk is in the

worst condition. According to the Deputy Collector, the affected portion of this taluk comprises 57 villages or nearly three-fourths of the taluk, made up of almost the Owk division and about two dozen villages in the black cotton tract of the cusba firka. The usual resources of this taluk are the local products, which in ordinary years are considerably exported; but this year, the harvest in all the red soils and in a few of the black soil villages was almost a complete failure and therefore the taluk has to depend somewhat on imports from without. Further, the taluk is also not very fortunate in point of communications. Excepting the Owk-Tadpatri high road which runs through a portion of the Owk firka, there is no high road of any importance. The western and southern portions of the Owk firka are hilly, the Yerramalai range passing through them, and the Banganapalli Nawab's territory intercepts the taluk totally from north to south. The affected tract extends over an area of 252,942 acres or about 395 square miles and contains a population of about 52,000. The Deputy Collector gives no estimate of the numbers likely to require relief, but the Tahsildar is of opinion that eventually about 6,000 persons may turn out to be in need of relief. According to his detailed estimate, I conclude that 3,200 persons on the average for 7 months from March will have to be provided for. This is somewhat above 5 per cent. of the population of the affected tract. I recently visited this taluk and saw some of the villages affected, and on my personal experience I find that the Tahsildar's estimate is not above the mark. I should, if anything, say below it. Calculating at the rate of 2 annas per man per diem on the average, the total charge for 3,200 persons for a period of 7 months comes to Rs. 84,000. Besides these, I find that some kitchens are necessary to provide food to persons incapable of work and children of those engaged on works. About 500 persons on an average for 7 months from March will have to be so provided for; and allowing at the rate of one anna per head per diem or Rs. 2 per mensem, the total charge for this number for 7 months amounts to Rs. 7,000.

9. With regard to works I propose the following—The construction of a road from Jaladurgam in the Pattikonda taluk to Cherlapalli in the Koilkuntla taluk over the Yerramalai plateau to meet the Banganapalli-Tadpatri road near Cherlapalli at a cost of Rs. 40,975 and another from Owk to Koilkuntla at a cost of Rs. 47,000. I think that these two works, besides the Minor Irrigation and Public Works Department works as per list C enclosed, will amply suffice for our present purposes. The taluk being generally defective in point of wells, I require an allotment of Rs. 5,000 under the Land Improvement Loans Act.

10. *Nandyál taluk.*—The affected portions of this taluk where crops have generally failed this year are—(1) Udumalpuram, (2) Togarchedu, (3) Kowlur, (4) Nerwada, (5) Panem, (6) Balapanur, (7) Pólúr, (8) Bhímavaram, (9) Pulimuddi (these comprise a small portion forming a circle with about a 10-mile radius about the west and north of the Nandyál town), (10) Kothur, (11) Gaggatur (two villages in the extreme south), (12) Gadivemula (a village in the extreme north), (13) Narayanapuram, (14) Galichennayapalem, (15) Anupur, (16) Gazulapalle, (17) Baswapuram, (18) Tammadapalli, (19) Bukkapuram, (20) Kadamalakalwa, (21) Rayamalpuram, (22) Masidpuram, (23) Ayalur, (24) Orvakallu, (25) Sekunala, (26) Tippayapalli, (27) Brahmanapalli, (28) Gani, (29) Chennakkapalli, (30) Santajutur, (31) Peddadevalapuram. The normal supply of food-grains produced in this taluk, including of course the affected portions, is amply sufficient for its wants and there is generally neither exportation nor importation on a large scale. Some merchants from Koilkuntla taluk sell cholum in Nandyál and an appreciable quantity of paddy is exported from Nandyál town by the merchants of Banganapalli territory. As this year's harvest is generally estimated at only four annas, it is evident that it largely falls short of the requirements of the year and will, together with the large stocks remaining from last year, I estimate, provide food only for about six months to come. The Southern Mahratta Railway passes right through the middle of the taluk from west to east and the worst affected portion partly touches the line on both sides. Further, the country round the affected portions is flat and traversed everywhere by easy bandy-tracks. Even apart from the affected parts and besides the Southern Mahratta Railway, there are the Banganapalle frontier road, the Atmakúr-Koilkuntla road and the Kurnool-Cuddapah road, which pass through the taluk, and it is all therefore, excepting that very small portion of it which touches the Nallamalais, easily

accessible to trade. The probable number that will need relief is about 1,750, of which about 1,250 represents the numbers that will work and earn their livelihood, and the remaining 500 will have to be fed gratuitously. Calculating at the rate of 2 annas per diem on the average for each cooly that comes upon the works, the amount for 1,250 coolies for a period of 4 months comes to Rs. 18,750 and to make provision for this, I recommend that the works as per list C may be ordered to be taken on hand, whenever the need for the same arises.

11. With regard to gratuitous relief, the cost of feeding 500 persons at the rate of, say, one anna a day or 2 rupees per month for a period of 4 months, comes to Rs. 4,000. I may put down Rs. 5,000 as the allotment required under the Land Improvement Loans Act.

12. *Sirvél taluk.*—This is the second best-off taluks in this district. Its affected portion consists of the villages of (1) Mahadevapuram, (2) Boyal Kuntla, (3) Yallavattula, (4) Pedda Kumbalur, (5) Gangavaram, (6) Kotakonda, (7) Srirungapuram, (8) China Kambalur, and (9) Sirvél, lying about the north-east corner of the taluk. The crops in these villages have withered partially, but the rest of the taluk has fared very well and had on the average not less than an 8-anna crop everywhere, both wet and dry. The total harvest of food-grains, *i.e.*, rice, ragi, cholum and miscellaneous food-crops, such as sujja, arika and korra, are estimated to provide food for almost nearly 10 months and the balance of last year's stock is reported to be more than sufficient for about two months' consumption, so that the food-supply is amply sufficient for the next 12 months to come. Further, rice is imported on a small scale from Kistna and Cuddapah districts. With regard to accessibility to trade, the taluk is traversed by the Kurnool-Cuddapah road alongside the Kurnool-Cuddapah irrigation canal on the western side of the taluk, but there are no other roads nor are there any large towns, the largest in the taluk containing only from 2,000 to 3,000 inhabitants. Trade is not, therefore, very active generally, but the taluk lies not far off from the two important centres of trade, Nandyál on the one side, almost adjoining, and Cuddapah on the other, within a distance of some 36 miles. The Head Assistant Collector Mr. J. A. Cumming in whose charge this taluk lies is of opinion that no relief works on any extensive scale are necessary and that the provisions of the Famine Code need not be made applicable to this taluk, but, however, both according to his as well as the Tahsildar's estimate, the number of persons that may eventually turn out to be in need of relief approximates only 500, and to make provision for this number at the rate of 2 annas per diem for a period of 4 months, a sum Rs. 7,500 will be required. I would therefore propose the opening of the minor irrigation works mentioned in list C accompanying estimated to cost Rs. 8,036. No allotments under the Loans Acts or gratuitous relief are required for this taluk.

13. *Cumbum taluk.*—The area affected in this taluk is the whole of the Racherla Revenue Inspector's firka and a portion of the Cumbum Revenue Inspector's firka consisting of the villages of (1) Lanjakota, (2) Nadunpalle, (3) Arungabad, (4) Salakalavid, (5) Pitikayagundla, (6) Madana Pullalacheruvu, (7) Basivepalli, (8) Galijerugundla and (9) Konapalli on the east and about half a dozen villages on the north. The usual resources of this taluk are the local crops, but this year, owing to the failure of the monsoons, Guntúr and other large centres of trade have been drawn on for supply of food-grains. The failure of water in the Cumbum tank for raising second-crop cultivation has greatly crippled the resources of this taluk. However, according to my estimate, there is at present enough of food-supply for about a lakh of persons for a period of four months. The communications and means of transport into the interior of the taluk are generally defective, and owing to this to some extent, there is much slackness on the part of the local traders to import grain from outside, but the introduction of the Southern Mahratta Railway which passes through a portion of the affected area has considerably changed matters and even if the existing supply of food-grains should run short before the next harvest, there is every facility for timely replenishment by imports. As to the probable number of persons likely to come on relief works, the Divisional-officer estimates this at 5,000. Calculating at the rate of 2 annas per man per diem, the amount comes to Rs. 1,68,750 or Rs. 1,70,000 in round figures for nine months from January. To provide for this I

beg to propose the works as per list C. With regard to gratuitous relief, the Divisional-officer says that about 500 persons may require it. Allowing one anna per soul per diem or Rs. 2 per month, the charge for feeding 500 persons for nine months from January comes to Rs. 9,000.

14. The advantages of special well rules being appreciated in this taluk, I would ask for an allotment of Rs. 20,000 under the Land Improvement Loans Act.

15. *Márkápur taluk.*—This is worst of all, and the whole of this taluk is seriously affected. In ordinary years, the people here depend upon the ragi and cumbu crops raised under wells and other food-grains raised on dry lands. There is comparatively little wet cultivation in the taluk, so that the failure of the dry crops is naturally followed by scarcity and distress. This year, owing to the Southern Mahratta Railway running through it, it has been possible to import large quantities of cumbu, cholum and ragi from Guntúr, Narsaraopet and Kistna canal in the Kistna district. Thus, at the present moment, there is, in spite of the very bad harvest, no lack of food-grains and the present stock is estimated to provide food for about a lakh of people for two months. This taluk is particularly defective in point of communications and, therefore, trade is far from active in the interior; but the Railway has changed matters to some extent and when the existing stocks of food-grains are exhausted, there will not be any difficulty in early replenishing the same. As to the probable number requiring relief, the Divisional-officer estimates this at 14,000 persons and to provide this number for a period of 11 months from January last at an average of 2 annas per man per diem, the cost will come to Rs. 5,77, 500 or say Rs. 5,80,000 in round figures. To provide work for this amount, I beg to recommend works as per list C, amounting to Rs. 2,58,502, and proposals for the remaining amount will follow on receipt of information from the Deputy Collector. With regard to gratuitous relief I estimate the number requiring this at 1,500 on the average for 11 months. At the rate of one anna per man per diem or Rs. 2 per month, the cost comes to Rs. 33,000 in round figures. In this as well as in the Cumbum taluk, the period of continuance of distress has been calculated to extend till about October and November next, as these taluks mostly depend upon the later monsoons and agricultural labourers do not generally find enough of employment till then.

16. *Loans.*—As cultivation in this taluk largely depends upon wells, I would require an allotment of Rs. 25,000 under the Land Improvement Loans Act.

17. *Weavers.*—This class of labourers will form the subject of a separate report.

18. With regard to extra establishments, I beg to state that the following additional hands will be necessary:—

(1) Special Assistant Collector to aid the Collector—his salary, say Rs. 700 a month, for 6 months from March to August, Rs. 4,200.

(2) Two Deputy Collectors for Cumbum and Pyápali Divisions. Their salary, at Rs. 250 each for a month, for 6 months from March to August, Rs. 3,000.

(3) Four Special Deputy Tahsildars to aid the Tahsildars of Cumbum, Márkápur, Pattikonda and Koilkuntla at Rs. 70 each per mensem. The salary of the first two for 10 months from January to October being Rs. 1,400, and that of the latter two for 4 months from March to June being Rs. 560 or total Rs. 1,960.

(4) A special Public Works Department officer, say of the grade of Assistant Engineer, to supervise works in Pyápali Division. His salary Rs. 500 per mensem; for 4 months, Rs. 2,000.

(5) Establishments of the above-named officers, say Rs. 2,000, on the whole. The total amount that will be required under this head, therefore, comes to 4,200 + 3,000 + 1,960 + 2,000 + 2,000 = Rs. 13,160.

19. To sum up, my estimate for the whole district comes to Rs. 9,83,500 for works, Rs. 58,200 for gratuitous relief, and Rs. 65,000 for advances under the Loans Acts to landed classes and Rs 13,160 under extra establishment.

20. I beg to enclose statements (A) of forecast of outlay on works; (B) of allotments required under gratuitous relief and loans; (C) of works selected from the programme for execution.

A.—FORECAST of outlay on works proposed to be executed in the Kurnool district in the year 1892.

Taluks.	Population as per census of 1891.	Average number of persons who will probably require work.	Period for which numbers in column 3 require work.	Proportion of column 3 to column 2.	Cost of providing work for the numbers shown in column 3 at 2 annas per head per diem for the periods mentioned in column 4.
1	2	3	4	5	6
			MONTHS.		RS.
1. Pattikonda	138,787	2,500	4	1·80	37,500
2. Rámallakót	125,272	1,500	6	1·19	33,750
3. Nandikótkur	88,575	1,500	4	1·69	22,500
4. Nandyál	96,447	1,250	4	1·20	18,750
5. Koilkuntla	86,631	3,200	7	3·69	84,000
6. Sirvel	65,202	500	4	0·76	7,500
7. Cumbum	116,538	5,000	9	4·29	1,68,750
8. Márkápur	100,076	14,000	11	13·98	5,77,500
Total ..	817,528	29,450	6	3·60	9,50,250

Taluks.	Heads under which work is proposed to be provided and cost under each head.					Grand Total.	Allotment applied for.
	Public Works Department.	Minor Irrigation Works.	Local Funds.				
			Repair or construction of roads.	Village improvements and water supply.	Total.		
	7	8	9	10	11	12	13
	RS.	RS.	RS.		RS.	RS.	RS.
1. Pattikonda	500	..	37,000	..	37,000	37,500	37,500
2. Rámallakót	16,115	2,605	15,000	..	15,000	33,120	34,000
3. Nandikótkur	14,250	..	12,000	..	12,000	26,250	26,000
4. Nandyál	..	19,826	..	..	..	19,826	20,000
5. Koilkuntla	960	21,290	87,975	..	87,975	1,10,225	1,10,000
6. Sirvel	..	8,036	..	..	..	8,036	8,000
7. Cumbum	71,000	4,485	85,800	..	85,800	1,61,285	1,70,000
8. Márkápur	40,000	21,217	1,97,285	..	1,97,285	2,58,502	5,78,000
Total ..	1,42,825	76,859	4,35,060	..	4,35,060	6,54,744	9,83,500

B.—STATEMENT showing allotments recommended for gratuitous relief and advances under the Loans Acts in the Kurnool district in the year 1892.

Taluk.	Population as per census of 1891.	Probable average number requiring gratuitous relief.	Proportion of column 3 to column 2.	Period for which relief will be required.	Cost of relief at Rs. 2 per head per mensem for the period shown in column 5.	Allotment now applied for.	Allotments applied for under the Loans Act.			Total of columns 7 and 10.
							Under the Land Improvement Act.	Under the Agriculturists' Loans Act.	Total.	
1	2	3	4	5	6	7	8	9	10	11
				MTHS.	RS.	RS.	RS.	RS.	RS.	
1. Pattikonda ..	138,787	500	0·36	4	4,000	4,000	6,000	4,000	10,000	14,000
2. Rámallakót ..	125,272	150	0·11	4	1,200	1,200	..	..	..	1,200
3. Nandikótkur ..	88,575	..	..	..	..	..	..	..	..	..
4. Nandyál	96,447	500	0·51	4	4,000	4,000	5,000	..	5,000	9,000
5. Koilkuntla ..	86,631	500	0·57	7	7,000	7,000	5,000	..	5,000	12,000
6. Sirvel	65,202	..	..	..	..	..	..	..	..	..
7. Cumbum	116,538	500	0·42	9	9,000	9,000	20,000	..	20,000	29,000
8. Márkápur	100,076	1,500	1·49	11	33,000	33,000	25,000	..	25,000	58,000
Total ..	817,528	3,650	0·44	5	58,200	58,200	61,000	4,000	65,000	123,200

C.—LIST of works referred to in columns 7 to 12 of statement A.

Taluks.	Name and cost of work proposed to be executed.	
	Name of work.	Amount of estimate.
1	2	3
	(a) Public Works Department Works.	Rs.
Pattikónda	(1) Repairs of Pulacheruvu of Bollagallu	200
	(2) Do. of Peddacheruvu of Pattikónda	200
	(3) Do. of Nallacheruvu of Karivemula	100
	Total ..	500
	(b) Local Fund Road Works.	
	(1) Road from Kodumur to Gonigundla village frontier	15,000
	(2) Do. from Vobalapuram to Devarabanda	13,750
	(3) Do. from Maddikeru to Pattikónda	8,250
	Total ..	37,000
	Grand Total ..	37,500
Rámallakót	*(a) Public Works.*	
	(1) Repairs of Veldurti tank	8,300
	(2) Do. of Yerradoddi division	7,815
	Total ..	16,115
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Kurnool town	15,000
	(c) Minor Irrigation Works.	
	(1) Gúdúr tank	730
	(2) Do.	275
	(3) Tadakanapalli division	1,000
	Total ..	2,005
	Grand Total ..	33,120
Nandikótkur taluk	*(a) Public Works Department Works.*	
	(1) Repairs of Chinna and Peda Mallalamma tank	14,250
	(b) Local Fund Works.	
	(1) Breaking and stacking metal near Nandikótkur 19 miles	12,000
	(c) Minor Irrigation Works. Total ..	26,250
Nandyál taluk	(1) Mitual Peddakunta repairs	2,000
	(2) Bilakalagudur tank repairs	7,000
	(3) Digging a channel from Vaddagandla Buga to Nallavagu	90
	(4) Repairing supply channel of Bandi Atmákur tank	450
	(5) Parmatur Peddakunta repairs	4,500
	(6) Bollavaram tank repairs	5,750
	Total ..	19,826
	(a) Public Works Department Works.	
Koilkuntla taluk	(1) Repairs to Owk tank	960
	(b) Local Fund Road Works.	
	(1) Road from Jaladurgam of Pattikónda taluk to Cherlopalli	40,875
	(2) Do. from Owk to Koilkuntla	47,000
	(c) Minor Irrigation Works. Total ..	87,875
	(1) Repair of tank at Gullasengavaram	2,200
	(2) Do. of Boddannanur	100
	(3) Do. of Gullathurthi	900
	(4) Do. of Injedu	250
	(5) Do. of Kolimigundla	5,000
	(6) Do. of Mayalur	750
	(7) Do. of Hanumatgundem	1,500
	(8) Do. of Kalvatala	10,000
	(9) Do. of Tudumuladinne	500
	Total ..	21,200
	Grand Total ..	1,10,235

List of works referred to in columns 7 to 12 of statement A—*cont.*

Taluks.	Name and cost of work proposed to be executed.	
	Name of work.	Amount of estimate.
1	2	3
	(c) Minor Irrigation Works.	Rs.
Sirvel taluk	(1) Peddakambalur-Kesavanju tank	100
	(2) Boyalakuntla tank	1,944
	(3) Yellavattula-Peddaraju tank	679
	(4) Sriranganpuram-Avala-Boyanna tank	134
	(5) Do. Tirunama tank	506
	(6) Do. Chinnally tank	1,195
	(7) Chinnakambalur Peddareddicheruvu	325
	(8) Do. Ankireddicheruvu	316
	(9) Do. Kottacheruvu	1,146
	(10) Do. Kotamanscheruvu	498
	(11) Gangavaram-Dokkacheruvu	121
	(12) Sirvel-Nagalacheruvu	803
	(13) Purur-Navallacheruvu	369
	Total ..	8,036
	(a) Public Works Department Works.	
Cumbum taluk	(1) Repairs of Timmannacheruvu of Bollupalli	4,500
	(2) Do. of Cumbum tank	29,000
	(3) Do. of Tappatavanicheruvu of Turimilla	2,000
	(4) Do. of Dasabandamcheruvu of Kakarla	5,000
	(5) Do. of Sankaranicheruvu of Gudimetta	8,000
	(6) Do. of Maisummacheruvu of Basinepalli	10,000
	(7) Do. of Dasabandamcheruvu of Komarolu	3,500
	(8) Do. of Peddithappa do.	4,000
	(9) Do. of Peddacheruvu of Reddicherla	5,000
	Total ..	71,000
	(b) Local Fund Road Works.	
	(1) Road from Cumbum to Taticherla	50,000
	(2) Do. from Donakonda to Cumbum	35,800
	Total ..	85,800
	(c) Minor Irrigation Works.	
	(1) Repairs of Duddavadu of Kothacheruvu	150
	(2) Do. of Gumilakamma-Katwa of Tudimella	1,500
	(3) Do. of Chennuryanicheruvu of Aravid	200
	(4) Do. of Mallayacheruvu of Akiwid	280
	(5) Do. of Doddalicheruvu of Akiwid	550
	(6) Do. of Yerravaga Katwa of Akiwid	25
	(7) Do. of Janapalati Katwa of Bollupalli	20
	(8) Do. of Ardavid	260
	(9) Do. of Gundlakamma-Katwa of Yerrabalem	1,500
	Total ..	4,485
	Grand Total ..	1,61,285
Márkápur taluk ..	*(a) Public Works Department Works.*	
	(1) Peddacheruvu of Vemulakota	8,000
	(2) Circarcheruvu of Márkápur	3,000
	(3) Badvid tank	3,000
	(4) Dupand do.	2,000
	(5) Yerragondapallem tank	15,000
	(6) Tripurantakam cheruvu	5,000
	(7) Ganapavaram cheruvu	4,000
	Total ..	40,000
	(b) Local Fund Works.	
	(1) Removing prickly-pear at Márkápur town	2,000
	(2) Márkápur road	15,000
	(3) Dupand road	30,000
	(4) Dornah do.	80,000
	(5) Vemulakota road	15,000
	(6) Isukatripuravaram road	19,285
	(7) Rajampally-Jagamkuntla road	36,000
	Total ..	1,97,285
	(c) Minor Irrigation Works.	
	(1) Yellareddikunta of Rachakonda	1,000
	(2) Kolakulacheruvu of Gollavidigi	3,000

List of works referred to in columns 7 to 12 of statement A—*cont.*

Taluk.	Name and cost of work proposed to be executed.	
	Name of work.	Amount.
1	2	3
	(c) *Minor Irrigation works*—cont.	Rs.
Márkápur taluk	(3) Repairs of Kankanalapalli tank	1,000
	(4) Do. of Tippayapalem tank	190
	(5) Do. of Mallenpeta tank	1,584
	(6) Do. of Balijapalli tank	1,948
	(7) Do. of Bupatipalli tank	260
	(8) Do. of Chapalmadugu tank	1,200
	(9) Do. of Narasiahpallem tank	75
	(10) Do. of Medapi tank	540
	(11) Do. of Annagari cherum	770
	(12) Do. of Bakkareddi tank of Rachakonda	200
	(13) Do. of Kankanalapalli tank	100
	(14) Do. of Dammavari gulla tank	150
	(15) Do. of Gurrapuvala tank	8,000
	(16) Do. of Karolla tank	200
	(17) Removing silt from Chennakeswaraswam Koneri, Márkápur ..	1,000
	Total ..	21,217
	Grand Total ..	2,58,502
	Grand Total of all taluks ..	6,54,744

Resolution—dated 21st March 1892, No. 218.

The Collector's report will be submitted for the orders of Government.

2. The areas in Kurnool which have suffered more or less severely from the failure of the usual rains during the past season and in which distress is being felt are as follows:—

Pattikonda taluk, four villages on or adjoining the Yerramala plateau on the south-east of the taluk, close to the affected area in Tadpatri and Koilkuntla; nine villages situated on the border of the taluk immediately south of Pattikonda, adjoining the affected area in Alur; and about twenty villages at the northern extremity of the taluk near Kodumur and Bellagal, adjoining the affected area in Adóni. These villages have an area of about 300 square miles and a population of 40,742, 2,500 of whom are expected on the average to need relief on works and 500 in kitchens up to the end of June.

Ramallakot taluk, twenty villages on the western side of the taluk with an area of 128 square miles, and in this area the Collector estimates that 1,500 persons will need employment on relief works for six months and that 150 may have to be fed in kitchens for four.

Nandikotkur taluk, fared better than the rest of the district, and it is only in 16 villages situated about the centre of the taluk and adjoining the affected villages on the north-west border of Nandyal that are at all affected, the taluk generally having had excellent early and late crops, the Kurnool-Cuddapah canal having supplemented the local deficiency of the rainfall in a good many villages. The Collector does not anticipate that many coolies will resort to relief works in the taluk till April or May, when 1,000 may have to be provided for in addition to those already employed by the Public Works Department on two large tank works, both of which, however, are situated at a considerable distance from the affected area. The Collector has already opened a road work near the village of Nandikotkur.

Nandyal taluk, nine villages situated west and north of Nandyal town, two villages on the extreme south, seven villages on the north-west and ten villages on the eastern border of the taluk close to the Nallamalas. The Collector estimates that 1,750 persons may need relief in this taluk, 500 of whom would have to be fed in kitchens.

Koilkuntla taluk, according to the Divisional officer, nearly the whole of the Owk division and about 24 villages in the black cotton soil tract near Koilkuntla itself. The area affected is about 395 square miles with a population of about 52,000, of whom the Collector estimates 3,200 on the average will need relief on works for seven months, and about 500 have to be fed in kitchens for the same period.

Sirvel taluk fared well; the distressed area lies in the north-east corner of the taluk, where 9 villages are affected. In this taluk it is estimated, that only 500 persons may need relief on works.

Cumbum taluk, the area affected has already been reported and consists of nearly all the northern half of the taluk, in parts of which the failure of the supply of water in the great Cumbum tank has crippled the resources. In this taluk, the Divisional officer estimates that 5,000 persons may need relief on works and 500 at kitchens for nine months from January last.

Markapur taluk is the worst portion of the district and is affected throughout. In this taluk the Collector estimates that an average of 14,000 people will need relief on works and 1,500 at kitchens up to the end of November next.

3. The particulars given above may be abstracted as follows:—

Taluk.	Period during which relief required.	For relief on works.			For relief at kitchens.	
		Numbers.	Collector's estimate of cost.	Cost at current prices.	Numbers.	Collector's estimate of cost.
			Rs.	Rs.		Rs.
Pattikonda	4	2,500	37,500	23,438	500	4,000
Ramallakot	6	1,500	33,750	21,094	150	1,200
Nandikotkur	4	1,500	22,500	14,063	..	..
Nandyal	4	1,250	18,750	11,719	500	4,060
Koilkuntla	7	3,200	84,000	52,501	500	7,000
Sirvel	4	500	7,500	4,687	..	..
Cumbum	9	5,000	1,68,750	1,05,469	500	9,000
Markapur	11	14,000	5,77,500	3,60,944	1,500	33,000
Total ..	..	29,450	9,50,250	5,93,915	3,650	58,200

The numbers which have resorted to relief works during the four weeks of February were as follows for each taluk in which works are now open:—

Taluks.	February.			
	6th.	13th.	20th.	27th.
Pattikonda	..	..	601	510
Ramallakot	1,636	577	846	738
Nandikotkur	206	519	685	568
Koilkuntla	..	28	792	887
Cumbum	2,762	5,417	6,967	7,040
Markapur	6,192	6,179	6,546	7,299
Total ..	10,196	12,720	16,437	17,042

The average number for the whole district during February is thus about 14,100 or less than the Board's original estimate (Board's Proceedings, dated 21st January 1892, No. 44), and the Commissioner sees no reason for anticipating that the numbers are likely in succeeding months to rise much above the estimate given therein. The average number therefore that may have to be provided for during the four months, March to June, both inclusive is not likely to reach the Collector's figure. The Commissioner also considers that, should the next south-west monsoon rains fall in reasonable amount and begin at the usual time—the end of May—the continuance of relief operations after the end of June

February	15,000	March to June	60,000	
March	20,000			
April	25,000			
May	25,000			
June	15,000			

will be unnecessary, though it may be found advisable to continue expenditure on a few works carried out under ordinary rules. Even in the Cumbum and Márkápur taluks the cultivation accounts show that nearly 60 per cent. of the whole year's crop is sown before the middle of August, and these accounts are notoriously behind the actuals. It is not, therefore, he considers, necessary to estimate for more than four months' continuance of relief at present, and, allowing for an average of 25,000 persons at current prices, a sum of Rs. 2,50,000 for expenditure on wages should suffice, to which an addition of about 10 per cent. must be made for petty supervision.

4. The Collector submits lists of works which he has selected as suitable for relief, of which the following is an abstract :—

Taluks.	Irrigation works.		New roads.	Road repairs.	Total allotment applied for.
	Number.	Estimate.	Cost.	Cost.	
		Rs.	Rs.	Rs.	Rs.
Pattikonda	3	500	37,000	..	37,500
Rámallakót	5	18,120	..	15,000	33,120
Nandikótkur	1	14,250	..	12,000	26,250
Nandyál	6	19,826	..	..	19,826
Koilkuntla	10	22,250	87,975	..	1,10,225
Sirvel	13	8,036	..	..	8,036
Cumbum	18	75,485	85,800	50,000	2,11,285
Márkápur	24	61,217	85,285	1,10,000	2,56,502
Total ..	80	2,19,684	2,96,060	1,87,000	6,46,744

In the Rámallakót taluk, the repairs of the Veldurti tank costing Rs. 8,300 and in the Nandikótkur taluk those of the two tanks in Ramapuram costing Rs. 14,250 have already been provided for in the Public Works Department budgets. Deducting these sums, the Commissioner requests that sanction may be accorded for carrying out the remaining irrigation works mentioned by the Collector, the estimates and plans being first approved by the Public Works Department, by whom the irrigation works will be carried out, as required. Regarding the road works, the Commissioner considers that they should be confined as far as possible to the breaking and stacking of metal along the lines of existing roads. He would, however, make exceptions in the case of the following if the Collector finds it absolutely necessary to open them :—

Pattikonda	Road from Kodumur to Gonegundla frontier.
Koilkuntla	„ from Owk to Koilkuntla.
Márkápur	„ from Dupad, northwards.

5. The Collector will be requested to submit a statement showing all the irrigation works in each taluk, on which money can be usefully spent, showing at the same time any expenditure incurred on them during the last five years and the average revenue obtained from each during the same period. It seems quite possible that more funds might be usefully spent on the repair or improvement of these works.

6. The Collector also estimates that it will be necessary to relieve an average of 3,650 persons gratuitously in kitchens for varying periods. This estimate of number may be accepted, but the period during which this form of relief will be necessary may, the Commissioner considers, be reduced to four months and the allotment applied for (Rs. 58,200) to Rs. 20,000.

7. The Collector further estimates that he may be able to advance Rs. 61,000 for well-sinking, but the Commissioner considers that, if the local officers bestir themselves in the matter, it should be possible not only to do a good deal in the Rámallakót, Nandikótkur, and Sirvel taluks, for which the Collector makes no provision, but to advance larger sums than he estimates for in the remaining taluks. Márkápur, Cumbum, and parts of Sirvel are well favored for well-sinking, as also are some parts of the remaining taluks and no effort should be spared in any taluk to push forward this most valuable work.

To

H. E. THE RIGHT HON'BLE

BEILBY BARON WENLOCK, G.C.I.E.,

Governor and President in Council,

FORT ST. GEORGE,

MAY IT PLEASE YOUR EXCELLENCY,

We, the passed Engineer Students of the College of Engineering, most respectfully beg to bring to your Excellency's kind consideration the following *additional* facts in connection with our Memorial dated 9th January, 1892, now under consideration :—

1. The first Notification of the 20th January, 1886, sets forth "the number of appointments to be so awarded will be in proportion to the requirements of the service and will be fixed by the Chief Engineer. The number so determined will be announced annually at least 6 months before the final College Examination." It therefore follows that the number of appointments will be regulated by the probable number of vacancies in each year. Now with reference to the said vacancies only a *small portion* of them was to be filled up by departmental promotion (*vide* Original Notification) while according to the altered notification, the *major portion* of the vacancies was to be filled by departmental promotion and the remaining ones may or may not be reserved for the Engineer Students.

2. As a matter of fact there have been 8 vacancies in the Supervisor, 2nd Grade during the official year 1889-90 (the year in which we passed our final College Examination) as the accompanying list shows, but none of those 8 vacancies were published "6 months before the final College Examination" as the 1st Notification requires and not even a portion was reserved for us, as is done in the case of Engineer Subordinate Students with regard to the appointment of Overseers, 3rd Grade.

3. We further beg to state that after the introduction of the New Curriculum in January 7th, 1886, and after the publication of the 1st Notification in the *Gazette* there have been in all 26 vacancies in the Supervisor, 2nd Grade up to April 1891, as shown by the following list, and all these vacancies have been solely filled by departmental promotion, and not a single vacancy has been reserved for selection from the Engineer Students as the 1st Notification sets forth. As the vacancies that have occurred during the last 5 years have all thus been filled up without any reserve, we fear there may not be several vacancies now. Should such

be the case we humbly request your Excellency to treat ours as a special case and confer on us at least 5 appointments as Supervisors, 2nd Grade (as has been done in the year 1881, by His Grace the then Governor, Duke of Buckingham) as 8 students passed in our set (the largest of the 1st 7 sets under the New Curriculum, ours being the 2nd, the rest still undergoing their Courses) and as in the official year 1889-90 (the year in which we passed our final College Examination), there occurred 8 vacancies in the Supervisor Grade.

4. We paid our respects to the Chief Engineer, a few days ago and he was inclined to offer some of us appointments as Supervisors, 2nd Grade, in the *temporary* establishment of the D. P. W. But the Memorialists fear that, as the rule at present stands, should we enter the temporary establishment as Supervisor, 2nd Grade, there is no chance of our ever being made permanent in that Grade, if all the vacancies in the Supervisor, 2nd Grade of the permanent establishment are to be filled up solely by promotion from the best qualified Overseers, as has been done with these 26 vacancies during the last 5 years.

5. Your Excellency's Memorialists, in conclusion, humbly beg therefore that Your Excellency will be pleased to confer on us these appointments in the *permanent* Establishment as Supernumerary (in case there be no vacancies now) to be absorbed as vacancies occur, as a *special case for our set as we unlike the subsequent sets of Engineer Students* (who joined the College after the publication of the altered Notification), joined the College on the expectation of appointments of Supervisors held out by the 1st Notification.

For which act of kindness and concession we, as in duty bound, shall EVER PRAY.

R. Sweard
C. S. Venkatarama aiyar
S. K. Ramaswami

For the Engineer Students.

11*th February*, 1892.

List of vacancies of Supervisors, 2nd Grade, in the permanent establishment of the D. P. W. that have occurred during the 5 consecutive official years (1886-87 to 1890-91) and have been filled up *solely by departmental promotion* and confirmation from Permanent Overseers, 1st Grade, acting as Supervisors, 2nd Grade, *sub-protem* or temporary rank as shown by the *Fort St. George Gazette*.

Official years.	Names.	Date of publication in the *Fort St. George Gazette*.	Page of *Gazette* in Part II.	Remarks.
1886-87	1. M.R.Ry. Nadamuni Mudaliar	7th April, 1886	542	Total No. of Vacancies 4
	2. „ S. Raghava Aiyangar	10th September, 1886	1500	
	3. Mr. J. R. Hendrick	10th „ 1886	1500	
	4. „ C. W. Traith	10th „		
1887-88	1. Mr. R. Harris	14th June, 1887	890	Do. 4
	2. M.R.Ry. C. R. Chinnaswami Aiyangar	13th December, 1887	2044	
	3. Mr. H. S. Lazarus	13th „ 1887	2045	
	4. M.R.Ry. M. Arumanayakam Pillai	3rd January, 1888	2	
1888-89	1. Sergeant L. Donoghoe	17th April, 1888	603	Do. 4
	2. „ R. T. Healy	5th June, 1888	899	
	3. Sub-Conductor J. H. Ulyett	10th July, 1888	1072	
	4. Sergeant H. Slaney	15th January, 1889	38	
1889-90	1. Mr. J. W. Walsh	21st May, 1889	746	Do. 8
	2. Sergeant T. G. Blake	11th June, 1889	834	
	3. Mr. P. Whitbread	20th July, 1889	1084	
	4. „ J. Lawrence	5th August, 1889	1112	
	5. M.R.Ry. S. Panchajacara Aiyar	5th November, 1889	1467	
	6. „ T. Muniswami Mudaliar	17th December, 1889	1656	
	7. „ P. Krishnamachari	28th January, 1890	122	
	8. Sergeant S. Hearne	18th March, 1890	427	
1890-91	1. Sergeant [illegible] Mudaliar	3rd June, 1890	784	Do. 6
	2. M. R. Ry. V. R. Kuppuswami	3rd „ 1890	784	
	3. Mr. A. E. C. Vas	25th November, 1890	849	
	4. M. R. Ry. A. Kuppuswami Mudaliar	27th January, 1891	86	
	5. Sergeant J. Alford	17th February, 1891	230	
	6. M.R.Ry. K. Viswanatha Iyer			

Total No. of Vacancies during the last 5 years ... 26

N.B.—The year in which we passed our final College Examination.

P. W. CURRENT No. 2126

Rd 26-2-92

File No. 44.

Serial No. 2.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

To THE SECRETARY TO THE GOVERNMENT OF MADRAS.

No. $\frac{498}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1309 R. A.—16-3-92.—132.—Jos. DeC.

No. $\frac{498}{44}$.

FROM

SIR E. C. BUCK, KT.,
Secretary to the Government of India,

TO

THE SECRETARY TO THE GOVERNMENT OF MADRAS.

Revenue and Agricultural Department.
Famine.

CALCUTTA, the 17th March 1892.

SIR,

IN communicating Circular Resolution No. $\frac{6}{44}$, dated the 17th instant, relating to wages on famine relief works, I am directed to convey the following remarks on the provisions of the Madras Famine Code dealing with the same subject.

2. The classification of labourers in the Madras Code appears to be somewhat indefinite. Class I of section 19 could, if the views of many authorities are accepted, be made to include the bulk of the agricultural population who are said to be accustomed, in the prosecution of the ordinary business of their life, to manual labour of the kind required at works where digging and carrying earth is the chief employment offered. The Government of India do not wish to lay down any rule on this question, but merely to point out that section 19 of the Madras Code is open to an interpretation which would make it difficult to decide that the wage of class I could not be awarded to the majority of labourers on relief works. They are aware that this is not done in practice and believe that a large number of labourers on the relief works opened in the Madras Presidency are brought under the third class. On this point information has not yet been definitely received, but has been called for in connection with the monthly report for February.

3. Turning now to the scale of wages, I am to ask that the desirability of allowing any part of the wage to be estimated in money may be very carefully considered. The schedule of wages framed in section 185 of the Code was drawn up in anticipation of a condition of prices which does not now prevail, and which, in view of the improvement of railway communications, is not perhaps likely again to occur. The rates of wages permissible under the Madras Code for classes I, II and III of section 185 are compared below with the

highest wage allowed in Bombay, when prices are respectively 12 seers a rupee (about the present rate) and 6 seers a rupee (a severe famine rate):—

Price of grain ruling.	WAGES ESTIMATED WHOLLY IN CASH.				WAGES ESTIMATED WHOLLY IN GRAIN.			
	Madras.			Bombay.	Madras.			Bombay.
	Class I.	Class II.	Class III.	All classes.	Class I.	Class II.	Class III.	All classes.
	A. p.	A. p.	A. p.	A. p.	lb	lb	lb	lb
12 seers a rupee . . .	2 6	2 0	1 7	1 6	$\frac{3}{4}$	3	$2\frac{3}{8}$	$2\frac{1}{4}$
6 seers a rupee . . .	3 6	3 0	2 5	3 0	$2\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{13}{16}$	$2\frac{1}{4}$

The above figures show that the Bombay wage becomes equivalent to the Madras second class wage when famine prices are ruling, and in view of the facts that very few labourers are in Madras placed in the first class, and that in Bombay the highest wage (*i.e.* the equivalent of $2\frac{1}{4}$ lb jowari) is payable to all able-bodied labourers of whatever class, it may be said generally that, under severe famine conditions which were contemplated when the Codes were framed, the actual wages given to the bulk of famine labourers in Bombay and Madras would become almost the same.

4. The explanation which in the Resolution referred to in paragraph 1 is given of the Famine Commissioners' policy indicates that, prices being the same, there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or, prices being different, between the famine ration of one province and the famine ration of another. Nor, again, should there be any material difference within the same province between the famine ration of one period and that of another. Discrepancies will be completely avoided by adherence to the Famine Commissioners' principle. The full wage must never exceed by more than a small margin, the money equivalent of a full subsistence ration sufficient to keep an able-bodied labourer in health and strength. In this view the most convenient plan would appear to be that adopted in the Provisional Code, *i.e.* first to decide what is the full ration sufficient to keep an able-bodied labourer in health and strength, and then to deduce the money equivalent from it as the basis of the full wage.

5. If there is reason to believe that, as a rule, the prices of condiments vary *pari passu* with the price of grain, the Bombay system of adopting a single grain as the basis of calculation is fair enough. If, however, the price of condiments has any recognised tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage.

6. I am to add that nothing in the Resolution on wages or in this letter is intended to convey any objection to the payment of the wage wholly or partly in cash.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

File No. 44.

Serial No. 2.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

To THE SECRETARY TO THE GOVERNMENT OF MADRAS.

No. $\frac{498}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1399 R. S. A.—15-3-92.—153.—Jos. DeC.

No. $\frac{498}{44}$.

FROM

SIR E. C. BUCK, KT.,
Secretary to the Government of India,

TO

THE SECRETARY TO THE GOVERNMENT OF MADRAS.

Revenue and Agricultural Department.
Famine.

CALCUTTA, the 17th March 1892.

SIR,

IN communicating Circular Resolution No. $\frac{6}{44}$, dated the 17th instant, relating to wages on famine relief works, I am directed to convey the following remarks on the provisions of the Madras Famine Code dealing with the same subject.

2. The classification of labourers in the Madras Code appears to be somewhat indefinite. Class I of section 19 could, if the views of many authorities are accepted, be made to include the bulk of the agricultural population who are said to be accustomed, in the prosecution of the ordinary business of their life, to manual labour of the kind required at works where digging and carrying earth is the chief employment offered. The Government of India do not wish to lay down any rule on this question, but merely to point out that section 19 of the Madras Code is open to an interpretation which would make it difficult to decide that the wage of class I could not be awarded to the majority of labourers on relief works. They are aware that this is not done in practice and believe that a large number of labourers on the relief works opened in the Madras Presidency are brought under the third class. On this point information has not yet been definitely received, but has been called for in connection with the monthly report for February.

3. Turning now to the scale of wages, I am to ask that the desirability of allowing any part of the wage to be estimated in money may be very carefully considered. The schedule of wages framed in section 185 of the Code was drawn up in anticipation of a condition of prices which does not now prevail, and which, in view of the improvement of railway communications, is not perhaps likely again to occur. The rates of wages permissible under the Madras Code for classes I, II and III of section 185 are compared below with the

highest wage allowed in Bombay, when prices are respectively 12 seers a rupee (about the present rate) and 6 seers a rupee (a severe famine rate) :—

Price of grain ruling.	WAGES ESTIMATED WHOLLY IN CASH.				WAGES ESTIMATED WHOLLY IN GRAIN.			
	Madras.			Bombay.	Madras.			Bombay.
	Class I.	Class II.	Class III.	All classes.	Class I.	Class II.	Class III.	All classes.
	A. p.	A. p.	A. p.	A. p.	lb	lb	lb	lb.
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6 seers a rupee . . .	3 6	3 0	2 5	3 0	$2\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{13}{16}$	$2\frac{1}{4}$

The above figures show that the Bombay wage becomes equivalent to the Madras second class wage when famine prices are ruling, and in view of the facts that very few labourers are in Madras placed in the first class, and that in Bombay the highest wage (*i.e.* the equivalent of $2\frac{1}{4}$ lb jowari) is payable to all able-bodied labourers of whatever class, it may be said generally that, under severe famine conditions which were contemplated when the Codes were framed, the actual wages given to the bulk of famine labourers in Bombay and Madras would become almost the same.

4. The explanation which in the Resolution referred to in paragraph 1 is given of the Famine Commissioners' policy indicates that, prices being the same, there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or, prices being different, between the famine ration of one province and the famine ration of another. Nor, again, should there be any material difference within the same province between the famine ration of one period and that of another. Discrepancies will be completely avoided by adherence to the Famine Commissioners' principle. The full wage must never exceed by more than a small margin, the money equivalent of a full subsistence ration sufficient to keep an able-bodied labourer in health and strength. In this view the most convenient plan would appear to be that adopted in the Provisional Code, *i.e.* first to decide what is the full ration sufficient to keep an able-bodied labourer in health and strength, and then to deduce the money equivalent from it as the basis of the full wage.

5. If there is reason to believe that, as a rule, the prices of condiments vary *pari passu* with the price of grain, the Bombay system of adopting a single grain as the basis of calculation is fair enough. If, however, the price of condiments has any recognised tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage.

6. I am to add that nothing in the Resolution on wages or in this letter is intended to convey any objection to the payment of the wage wholly or partly in cash.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

File No. 44.

Serial No. 2.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

To THE SECRETARY TO THE GOVERNMENT OF MADRAS.

No. $\frac{498}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1399 R. & A.—18-3-92.—152.—Jos. DeC.

No. $\frac{498}{44}$.

FROM

SIR E. C. BUCK, KT.,
Secretary to the Government of India,

To

THE SECRETARY TO THE GOVERNMENT OF MADRAS.

Revenue and Agricultural Department.
Famine.

CALCUTTA, the 17th March 1892.

SIR,

IN communicating Circular Resolution No. $\frac{6}{44}$, dated the 17th instant, relating to wages on famine relief works, I am directed to convey the following remarks on the provisions of the Madras Famine Code dealing with the same subject.

2. The classification of labourers in the Madras Code appears to be somewhat indefinite. Class I of section 19 could, if the views of many authorities are accepted, be made to include the bulk of the agricultural population who are said to be accustomed, in the prosecution of the ordinary business of their life, to manual labour of the kind required at works where digging and carrying earth is the chief employment offered. The Government of India do not wish to lay down any rule on this question, but merely to point out that section 19 of the Madras Code is open to an interpretation which would make it difficult to decide that the wage of class I could not be awarded to the majority of labourers on relief works. They are aware that this is not done in practice and believe that a large number of labourers on the relief works opened in the Madras Presidency are brought under the third class. On this point information has not yet been definitely received, but has been called for in connection with the monthly report for February.

3. Turning now to the scale of wages, I am to ask that the desirability of allowing any part of the wage to be estimated in money may be very carefully considered. The schedule of wages framed in section 185 of the Code was drawn up in anticipation of a condition of prices which does not now prevail, and which, in view of the improvement of railway communications, is not perhaps likely again to occur. The rates of wages permissible under the Madras Code for classes I, II and III of section 185 are compared below with the

highest wage allowed in Bombay, when prices are respectively 12 seers a rupee (about the present rate) and 6 seers a rupee (a severe famine rate) :—

Price of grain ruling.	WAGES ESTIMATED WHOLLY IN CASH.				WAGES ESTIMATED WHOLLY IN GRAIN.			
	Madras.			Bombay.	Madras.			Bombay.
	Class I.	Class II.	Class III.	All classes.	Class I.	Class II.	Class III.	All classes.
	A. p.	A. p.	A. p.	A. p.	lb	lb	lb	lb
12 seers a rupee . . .	2 6	2 0	1 7	1 6	$\frac{3}{4}$	3	$2\frac{3}{8}$	$2\frac{1}{4}$
6 seers a rupee . . .	3 6	3 0	2 5	3 0	$2\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{13}{16}$	$2\frac{1}{4}$

The above figures show that the Bombay wage becomes equivalent to the Madras second class wage when famine prices are ruling, and in view of the facts that very few labourers are in Madras placed in the first class, and that in Bombay the highest wage (*i.e.* the equivalent of $2\frac{1}{4}$ lb jowari) is payable to all able-bodied labourers of whatever class, it may be said generally that, under severe famine conditions which were contemplated when the Codes were framed, the actual wages given to the bulk of famine labourers in Bombay and Madras would become almost the same.

4. The explanation which in the Resolution referred to in paragraph 1 is given of the Famine Commissioners' policy indicates that, prices being the same, there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or, prices being different, between the famine ration of one province and the famine ration of another. Nor, again, should there be any material difference within the same province between the famine ration of one period and that of another. Discrepancies will be completely avoided by adherence to the Famine Commissioners' principle. The full wage must never exceed by more than a small margin, the money equivalent of a full subsistence ration sufficient to keep an able-bodied labourer in health and strength. In this view the most convenient plan would appear to be that adopted in the Provisional Code, *i.e.* first to decide what is the full ration sufficient to keep an able-bodied labourer in health and strength, and then to deduce the money equivalent from it as the basis of the full wage.

5. If there is reason to believe that, as a rule, the prices of condiments vary *pari passu* with the price of grain, the Bombay system of adopting a single grain as the basis of calculation is fair enough. If, however, the price of condiments has any recognised tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage.

6. I am to add that nothing in the Resolution on wages or in this letter is intended to convey any objection to the payment of the wage wholly or partly in cash.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

File No. 44.

Serial No. 1.

* 1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

5.

RESOLUTION.

10 S. c to Enclos
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Circular No. $\frac{6}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1070 R. & A.—17-3-92.—972.—Jos. deC.

view has, been sometimes held. But it is obvious that any material departure from the Famine Commissioners' rule would result in unnecessary expenditure, and a rapid exhaustion of the programme of works available, for not only would greater numbers of labourers be attracted to the relief-works by a prospect of the high profits which unlimited piece-work would offer, but also the work performed by each labourer would be greater. The object of the Famine Commissioners, *viz.* to restrict the admission on relief-works to those who are compelled by necessity to come to them, would in fact be frustrated.

"Some safeguards," they urge in paragraph 110, "are essential in the interests of the destitute people no less than of the public treasury; and they are best found in laying down certain broad, self-acting tests by which necessity may be proved and which may, independently of any other rule of selection, entitle to relief the person who submits to them."

"The chief of these tests," they continue in paragraph 111, "and the only one which in our opinion it is ordinarily desirable to enforce, is the demand of labour commensurate in each case with the labourer's powers in return for a wage sufficient for the purposes of maintenance but not more;" and they point out again (in paragraph 132) that "it is not expedient to add to the outlay on relief or to the consumption of food beyond what is essential, and that no object is to be gained by the early completion of any work put in hand."

And again, in paragraph 127, it is intimated that, although State employment should be offered promptly, yet care must be taken "that the cost to which the community as a whole is put by the employment of persons in want is no more than the case strictly requires."

4. On the 9th of June 1883 the Government of India, after consulting Local Governments, circulated with an explanatory Resolution a Provisional Famine Code, based upon the recommendations of the Famine Commissioners, for the guidance of Local Governments and Administrations in the preparation of the Provincial Codes which they were invited to frame. It was explained that the scheme of the Famine Commissioners for the provision of employment of labour on relief-works was accepted by the Imperial Government, and the principles which they laid down were generally embodied in the Provisional Code.

5. Relief-works were in this Code required to be distinguished as—

(I) Civil Agency works; and

(II) Professional Agency works;

the former whether professionally managed or not being under the control of the district authority, and the latter under the control of the Public Works Department. Labourers were, reading sections 39 and 71 together, divided into four classes—

A.—Able-bodied persons accustomed to labour of the kind required at works coming under class II.

B.—Able-bodied persons accustomed to labour but not to labour of the kind required on works under class II.

C.—Able-bodied persons not accustomed to labour.

D.—Persons not able-bodied but fit for light employment of the kind required at works of class I.

Labourers of class A were (sections 71 and 72 of the Code) eligible for employment on Professional Agency works and for treatment as ordinary able-bodied labourers in public works. All others were to be dealt with under the rules for Civil Agency works.

6. Chapter X of the Provisional Code, which dealt with wages and rations on relief-works, prescribed a "full ration" sufficient to keep able-bodied labourers in health and strength, leaving it to Local Governments to suggest such modifications as might be required by the circumstances of each province. The "full wage" was defined as the amount of money which at the current prices is sufficient to purchase a "full ration." Section 132 laid down that payment for labour on Professional Agency works might be made at the rate ordinarily given under the rules in force in the Public Works Department, provided that the sum which a labourer can ordinarily be expected to earn by a fair day's labour shall in no case be less than the "full wage." This rule applied to labourers of class A only, since all other labourers were brought by section 72 of the Code under the rules for Civil Agency Works. It will be observed, however, that the wording of the rule prescribed the "full wage" as a minimum only, and placed no restriction on the amount which might be earned by a class A labourer at departmental rates for piece-work. An opening was thus left for a departure from the intention of the Famine Commissioners, that even skilful and able-bodied labourers should only receive "a little more than the ordinary wage," which would, in the terms of the ~~Famine Commissioners~~ Provisional Famine Code, mean "a little more than the full wage." The object of the framers of the Code was, however, not to controvert the principles laid down by the Famine Commissioners and accepted by the Government of India, but to prevent undue restriction being placed on the progress of Public Works, of which, for special reasons, the early completion might be desirable. This has not been generally understood. Consequently, the result of the absence of any positive restriction on the wages of class A labourers has sometimes been that on earthwork, which is, wherever it can be provided, the most usual as it is the most appropriate relief-work, ordinary agricultural labourers have been considered to be sufficiently accustomed to the kind of labour required at the work to entitle them to be brought under class A, and to be given any amount of piece-work that the Public Works officer in charge of the work might deem to be desirable to secure the rapid and effective progress of the work itself. The principles laid down by the Famine Commissioners have thus been transgressed.

7. It has, on the other hand, occurred that the intention of the Famine Commissioners, that all skilful and able-bodied labourers should, for the reasons given in the passage quoted in paragraph 2 of this Resolution, receive a small margin above the full famine wage, has not been sufficiently appreciated; nor was this intention explained with sufficient distinctness in the Provisional Famine Code. The opportunity is now taken to give clear expression to the opinion of the Government of India that this consideration should be applied to all labourers of class A, and, subject to the remarks regarding the classification of ordinary cultivators which are made below in paragraph 10 of this Resolution, also to labourers of class B; money-wages and tasks being so adjusted from time to time as to admit of the labourers receiving "a little more than" the equivalent of the "full ration" of the Code.

8. In order, on the one hand, to secure the object which the framers of the Code had in view of preventing any undue restriction on the progress of a public work which is required as such independently of its use as a relief-work, and on the other, to prevent any transgression of the principles of the Code, which requires that no remuneration should be given to a labourer on a relief-work materially in excess of the amount sufficient to maintain health and

strength, it is desirable that, where this has not already been done, a rule to the following effect should be incorporated in the Provincial Code:

When a public work for which provision had already been made in the ordinary Public Works Budget of the year is included in the sanctioned list of Professional Agency works, the Local Government shall decide, in the event of its being utilized as a relief-work, whether any portion of it is of such a character, or requires to be executed with such urgency, as to demand the employment of ordinary public works labour at full piece-work rates. Such portion shall be separated from the portion utilized as a relief-work and shall not be opened to labourers admitted on the work simply for purposes of relief. On the portion retained as a relief-work the wages of able-bodied labourers, however skilled, shall not exceed the amount in money which is equivalent to a little more than the full famine wage.

9. Another direction in which a departure has been, in some cases, permitted from the principles laid down in the Provisional Famine Code, is in the expansion of money-wages for the purpose of providing a margin from which relief may be given to children and infirm dependents by their able-bodied parents or guardians who labour on relief-works. This was prohibited in the Provisional Code on the ground that experience had shown that starving parents cannot in times of severe famine safely be entrusted with the feeding of their children. The Government of India are not disposed to admit any modification of the principle which confines payment of a wage to those who work, and restricts its amount to a liberal money-equivalent of the subsistence ration to which the worker is in each case entitled. Any relaxation of the rule must lead to irregularity and wasteful expenditure. A margin adequate for the support of sick or infirm dependents in cases where they exist cannot, if given without discrimination to all able-bodied labourers, be otherwise than sufficiently large to prove unduly attractive to those who are free from such encumbrances. The provision, therefore, of any such margin must tend to destroy the value of the test which it was one of the main objects of the Famine Code scheme that relief-works should provide.

Recent experience in the Madras Presidency has tended to confirm the view that the system of famine kitchens and poor-houses for the support of the young and infirm is sound. In the event of serious famine the Government of India would be sorry to see it abandoned. But they are not prepared to insist absolutely on its adoption, especially in the earlier stages of distress, in those provinces where the proper relief of dependents by their guardians can be guaranteed; and if it is the wish of any Local Government or Administration that the original prohibition of relieving children and others through their parents and guardians should be modified or withdrawn, a separate communication on the subject may be submitted to the Government of India. But it must be distinctly understood that any allowance made for the support of dependents can only be permitted to those labourers who actually undertake the relief of their children or dependents; that it must be based upon a precise scale regulated in accordance with the number of dependents; and that all payments made for the purpose indicated should be shown in the accounts under the head of gratuitous relief.

10. Turning now to the subject of the division of labourers into classes, the Government of India find that much variety of practice exists in different provinces. This is partly due to a difference in the scale of famine rations

and wages assigned to each class, and partly to a difference of opinion as to the quality of the labour of those admitted to relief-works. The work most frequently given for purposes of relief is earthwork. It is argued by some of the authorities who deal with famine-relief that all agricultural labourers, including ordinary cultivators—men, women and children—are skilled and able-bodied; or, in the words of the Provisional Code, that they are able-bodied labourers accustomed to labour of the kind required at the works. The bulk of the labourers are thus brought into the highest class, *i.e.* class A of the Provisional Code. If this view be adopted and acted on, it is evident that the margin above a subsistence wage, or to use the words of the Famine Commissioners, the "little more than the ordinary daily wage," must be kept within narrow limits, and that wages should be carefully revised with every fluctuation of prices. If, on the other hand, as is the case in some provinces, only a very small percentage of labourers, such as old public works employés or others who have had professional experience, are admitted into class A, a more liberal margin may be permissible for that class, provided that, on the other hand, the wage of the B class is kept in closer approximation to the level of the subsistence wage of the Famine Code. In order that some general uniformity may be secured in the administration of famine-relief in different provinces, it is necessary that the Government of India should be provided with precise information as to the system on which classification of labourers is based, and as to the relation between the money-wage actually given and the money equivalent of the famine ration at current prices. Rules under which such information is to be periodically submitted are prescribed in Resolution No. 5, dated 2nd March 1892, on famine reports.

11. To sum up. Following the Famine Commissioners' recommendations labourers on relief-works may be classified according to their capability for work. The classes adopted in the Provisional Code are A, skilful and able-bodied accustomed to the kind of work required; B, able-bodied accustomed to work; C, able-bodied not accustomed to work; D, Others. Classes A and B may receive a full wage, *i.e.* a wage equivalent to a ration sufficient to keep an able-bodied labourer in health and strength, together with a margin. The margin may be more liberal for class A when it contains a small percentage than when it is allowed to include a large percentage of able-bodied labourers accustomed to work. The wage of class C will not exceed the full wage, and should be determined in general accordance with the principles of sections 133 and 134 of the Provisional Code. The wage may be given wholly in cash or partly in grain and partly in cash, but cash payments must be adjusted from time to time in accordance with prices of food. So much of a relief-work as requires to be pushed on for urgent reasons at a rapid rate should be removed from the list of relief-works and treated as an ordinary public work.

ORDER.—Ordered that a copy be forwarded to the Local Governments and Administrations noted in the margin for information and guidance.

Govt. of Madras.	Chief Commr., Central Provinces.
Do. Bombay.	Do., Burma.
Do. Bengal.	Do., Assam.
Do. N.-W. P. and Oudh.	Do., Coorg.
Do. Punjab.	Do., Ajmere-Merwara.
Secretary for Berar to the Resident at Hyderabad.	

Ordered also, that a copy be forwarded to the Foreign Department for information and communication to Political Officers in Native States, and to the Finance and Public Works Departments for information.

[True extract.]

E. C. BUCK,

Secretary to the Government of India.

File No. 44.
Serial No. 1.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

RESOLUTION.

Circular No. $\frac{6}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1070 R. & A.—17-3-92.—972.—Jos. deC.

CIRCULAR No. $\frac{6}{44}$.

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department,— dated the 17th March 1892.

READ—

Government of India Resolution No. 44 F., dated 9th June 1883.
" " " " 25 F., dated 10th September 1891.

Read also—

Government of India Resolution No. 5 F., dated the 2nd March 1892.

RESOLUTION.

The Government of India have found indications in reports on famine relief received during recent years from various provinces that the policy of the Famine Commissioners, which was endorsed both by the Government of India and Her Majesty's Secretary of State, on the subject of wages on relief-works, has not always been fully appreciated. In view of the probability that there may be, during the next few months, a material expansion of relief-works in some parts of the country, and of the possibility that, in the event of the failure of the next monsoon, considerable demands may be made on the Government of India for funds to relieve distress, the Governor General in Council considers it advisable that the subject should be carefully considered, in view of the fact that in the case of widespread and severe famine any material departure from the principles of the Famine Commissioners' report may lead to financial embarrassment.

2. The views of the Famine Commissioners on questions relating to the employment of labour on relief-works are embodied in paragraphs 110 and 111, and again in paragraphs 126 to 136 of Part I of the Report. In the first place it should be noted that a distinction is made in these paragraphs between various classes of labourers. Although the different classes are not brought under any close definition, it is clear from the wording of paragraph 131 that labourers were to be classified according to their capabilities and that a broad line was intended to be drawn between able-bodied labourers doing accustomed work and able-bodied labourers doing unaccustomed work, and it may be noticed that in paragraph 132 the first class appear to be distinguished under the term "both able-bodied and skilful." "One or more piece-work gangs might," it is said, "be attached to each large relief work, in which all who are both able-bodied and skilful labourers should be classed and to which those who are improving in strength and skill may, if they wish it, be transferred. The rates should be so fixed (with reference to the price of food-grain) as to give a little more than the ordinary daily wage in return for the quantity of work likely to be performed."

3. The ordinary daily wage alluded to in this passage is not the daily wage which may be earned by a labourer on a public work in ordinary times, but the ordinary daily wage dealt with in the preceding paragraph (131), which is to be "adjusted from time to time so as to provide sufficient food for the labourer's support, allowing him one day's rest in the week." It is clear, therefore, that the intention of the Famine Commissioners was that skilled able-bodied labourers should not be permitted to perform an unlimited or indefinite amount of piece-work on a famine relief-work. The opposite

view has, been sometimes held. But it is obvious that any material departure from the Famine Commissioners' rule would result in unnecessary expenditure, and a rapid exhaustion of the programme of works available, for not only would greater numbers of labourers be attracted to the relief-works by a prospect of the high profits which unlimited piece-work would offer, but also the work performed by each labourer would be greater. The object of the Famine Commissioners, *viz.* to restrict the admission on relief-works to those who are compelled by necessity to come to them, would in fact be frustrated.

"Some safeguards," they urge in paragraph 110, "are essential in the interests of the destitute people no less than of the public treasury; and they are best found in laying down certain broad, self-acting tests by which necessity may be proved and which may, independently of any other rule of selection, entitle to relief the person who submits to them."

"The chief of these tests," they continue in paragraph 111, "and the only one which in our opinion it is ordinarily desirable to enforce, is the demand of labour commensurate in each case with the labourer's powers in return for a wage sufficient for the purposes of maintenance but not more;" and they point out again (in paragraph 132) that "it is not expedient to add to the outlay on relief or to the consumption of food beyond what is essential, and that no object is to be gained by the early completion of any work put in hand."

And again, in paragraph 127, it is intimated that, although State employment should be offered promptly, yet care must be taken "that the cost to which the community as a whole is put by the employment of persons in want is no more than the case strictly requires."

4. On the 9th of June 1883 the Government of India, after consulting Local Governments, circulated with an explanatory Resolution a Provisional Famine Code, based upon the recommendations of the Famine Commissioners, for the guidance of Local Governments and Administrations in the preparation of the Provincial Codes which they were invited to frame. It was explained that the scheme of the Famine Commissioners for the provision of employment of labour on relief-works was accepted by the Imperial Government, and the principles which they laid down were generally embodied in the Provisional Code.

5. Relief-works were in this Code required to be distinguished as—

(I) Civil Agency works; and

(II) Professional Agency works;

the former whether professionally managed or not being under the control of the district authority, and the latter under the control of the Public Works Department. Labourers were, reading sections 39 and 71 together, divided into four classes—

A.—Able-bodied persons accustomed to labour of the kind required at works coming under class II.

B.—Able-bodied persons accustomed to labour but not to labour of the kind required on works under class II.

C.—Able-bodied persons not accustomed to labour.

D.—Persons not able-bodied but fit for light employment of the kind required at works of class I.

Labourers of class A were (sections 71 and 72 of the Code) eligible for employment on Professional Agency works and for treatment as ordinary able-bodied labourers in public works. All others were to be dealt with under the rules for Civil Agency works.

6. Chapter X of the Provisional Code, which dealt with wages and rations on relief-works, prescribed a "full ration" sufficient to keep able-bodied labourers in health and strength, leaving it to Local Governments to suggest such modifications as might be required by the circumstances of each province. The "full wage" was defined as the amount of money which at the current prices is sufficient to purchase a "full ration." Section 132 laid down that payment for labour on Professional Agency works might be made at the rate ordinarily given under the rules in force in the Public Works Department, provided that the sum which a labourer can ordinarily be expected to earn by a fair day's labour shall in no case be less than the "full wage." This rule applied to labourers of class A only, since all other labourers were brought by section 72 of the Code under the rules for Civil Agency Works. It will be observed, however, that the wording of the rule prescribed the "full wage" as a minimum only, and placed no restriction on the amount which might be earned by a class A labourer at departmental rates for piece-work. An opening was thus left for a departure from the intention of the Famine Commissioners, that even skilful and able-bodied labourers should only receive "a little more than the ordinary wage," which would, in the terms of the ~~Famine Commissioners~~ Provisional Famine code, mean "a little more than the full wage." The object of the framers of the Code was, however, not to controvert the principles laid down by the Famine Commissioners and accepted by the Government of India, but to prevent undue restriction being placed on the progress of Public Works, of which, for special reasons, the early completion might be desirable. This has not been generally understood. Consequently, the result of the absence of any positive restriction on the wages of class A labourers has sometimes been that on earthwork, which is, wherever it can be provided, the most usual as it is the most appropriate relief-work, ordinary agricultural labourers have been considered to be sufficiently accustomed to the kind of labour required at the work to entitle them to be brought under class A, and to be given any amount of piece-work that the Public Works officer in charge of the work might deem to be desirable to secure the rapid and effective progress of the work itself. The principles laid down by the Famine Commissioners have thus been transgressed.

7. It has, on the other hand, occurred that the intention of the Famine Commissioners, that all skilful and able-bodied labourers should, for the reasons given in the passage quoted in paragraph 2 of this Resolution, receive a small margin above the full famine wage, has not been sufficiently appreciated; nor was this intention explained with sufficient distinctness in the Provisional Famine Code. The opportunity is now taken to give clear expression to the opinion of the Government of India that this consideration should be applied to all labourers of class A, and, subject to the remarks regarding the classification of ordinary cultivators which are made below in paragraph 10 of this Resolution, also to labourers of class B; money-wages and tasks being so adjusted from time to time as to admit of the labourers receiving "a little more than" the equivalent of the "full ration" of the Code.

8. In order, on the one hand, to secure the object which the framers of the Code had in view of preventing any undue restriction on the progress of a public work which is required as such independently of its use as a relief-work, and on the other, to prevent any transgression of the principles of the Code, which requires that no remuneration should be given to a labourer on a relief-work materially in excess of the amount sufficient to maintain health and

strength, it is desirable that, where this has not already been done, a rule to the following effect should be incorporated in the Provincial Code:

When a public work for which provision had already been made in the ordinary Public Works Budget of the year is included in the sanctioned list of Professional Agency works, the Local Government shall decide, in the event of its being utilized as a relief-work, whether any portion of it is of such a character, or requires to be executed with such urgency, as to demand the employment of ordinary public works labour at full piece-work rates. Such portion shall be separated from the portion utilized as a relief-work and shall not be opened to labourers admitted on the work simply for purposes of relief. On the portion retained as a relief-work the wages of able-bodied labourers, however skilled, shall not exceed the amount in money which is equivalent to a little more than the full famine wage.

9. Another direction in which a departure has been, in some cases, permitted from the principles laid down in the Provisional Famine Code, is in the expansion of money-wages for the purpose of providing a margin from which relief may be given to children and infirm dependents by their able-bodied parents or guardians who labour on relief-works. This was prohibited in the Provisional Code on the ground that experience had shown that starving parents cannot in times of severe famine safely be entrusted with the feeding of their children. The Government of India are not disposed to admit any modification of the principle which confines payment of a wage to those who work, and restricts its amount to a liberal money-equivalent of the subsistence ration to which the worker is in each case entitled. Any relaxation of the rule must lead to irregularity and wasteful expenditure. A margin adequate for the support of sick or infirm dependents in cases where they exist cannot, if given without discrimination to all able-bodied labourers, be otherwise than sufficiently large to prove unduly attractive to those who are free from such encumbrances. The provision, therefore, of any such margin must tend to destroy the value of the test which it was one of the main objects of the Famine Code scheme that relief-works should provide.

Recent experience in the Madras Presidency has tended to confirm the view that the system of famine kitchens and poor-houses for the support of the young and infirm is sound. In the event of serious famine the Government of India would be sorry to see it abandoned. But they are not prepared to insist absolutely on its adoption, especially in the earlier stages of distress, in those provinces where the proper relief of dependents by their guardians can be guaranteed; and if it is the wish of any Local Government or Administration that the original prohibition of relieving children and others through their parents and guardians should be modified or withdrawn, a separate communication on the subject may be submitted to the Government of India. But it must be distinctly understood that any allowance made for the support of dependents can only be permitted to those labourers who actually undertake the relief of their children or dependents; that it must be based upon a precise scale regulated in accordance with the number of dependents; and that all payments made for the purpose indicated should be shown in the accounts under the head of gratuitous relief.

10. Turning now to the subject of the division of labourers into classes, the Government of India find that much variety of practice exists in different provinces. This is partly due to a difference in the scale of famine rations

and wages assigned to each class, and partly to a difference of opinion as to the quality of the labour of those admitted to relief-works. The work most frequently given for purposes of relief is earthwork. It is argued by some of the authorities who deal with famine-relief that all agricultural labourers, including ordinary cultivators—men, women and children—are skilled and able-bodied; or, in the words of the Provisional Code, that they are able-bodied labourers accustomed to labour of the kind required at the works. The bulk of the labourers are thus brought into the highest class, *i.e.* class A of the Provisional Code. If this view be adopted and acted on, it is evident that the margin above a subsistence wage, or to use the words of the Famine Commissioners, the "little more than the ordinary daily wage," must be kept within narrow limits, and that wages should be carefully revised with every fluctuation of prices. If, on the other hand, as is the case in some provinces, only a very small percentage of labourers, such as old public works employés or others who have had professional experience, are admitted into class A, a more liberal margin may be permissible for that class, provided that, on the other hand, the wage of the B class is kept in closer approximation to the level of the subsistence wage of the Famine Code. In order that some general uniformity may be secured in the administration of famine-relief in different provinces, it is necessary that the Government of India should be provided with precise information as to the system on which classification of labourers is based, and as to the relation between the money-wage actually given and the money equivalent of the famine ration at current prices. Rules under which such information is to be periodically submitted are prescribed in Resolution No. 5, dated 2nd March 1892, on famine reports.

11. To sum up. Following the Famine Commissioners' recommendations labourers on relief-works may be classified according to their capability for work. The classes adopted in the Provisional Code are A, skilful and able-bodied accustomed to the kind of work required; B, able-bodied accustomed to work; C, able-bodied not accustomed to work; D, Others. Classes A and B may receive a full wage, *i.e.* a wage equivalent to a ration sufficient to keep an able-bodied labourer in health and strength, together with a margin. The margin may be more liberal for class A when it contains a small percentage than when it is allowed to include a large percentage of able-bodied labourers accustomed to work. The wage of class C will not exceed the full wage, and should be determined in general accordance with the principles of sections 133 and 134 of the Provisional Code. The wage may be given wholly in cash or partly in grain and partly in cash, but cash payments must be adjusted from time to time in accordance with prices of food. So much of a relief-work as requires to be pushed on for urgent reasons at a rapid rate should be removed from the list of relief-works and treat ed as n ordinary public work.

ORDER.—Ordered that a copy be forwarded to the Local Governments and Administrations noted in the margin for information and guidance.

Govt. of Madras.		Chief Commr., Central Provinces.	
Do.	Bombay.	Do.,	Burma.
Do.	Bengal.	Do.,	Assam.
Do.	N.-W. P. and Oudh.	Do.,	Coorg.
Do.	Punjab.	Do.,	Ajmere-Merwara.

Secretary for Berar to the Resident at Hyderabad.

Ordered also, that a copy be forwarded to the Foreign Department for information and communication to Political Officers in Native States, and to the Finance and Public Works Departments for information.

[True extract.]

E. C. BUCK,

Secretary to the Government of India.

File No. 44.
Serial No. 1.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

RESOLUTION.

Circular No. $\frac{6}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1070 R. & A.—17-3-92.—972.—Jos. deC.

CIRCULAR No. $\frac{6}{44}$.

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department,— dated the 17th March 1892.

READ—

Government of India Resolution No. 44 F., dated 9th June 1883.
" " " " 25 F., dated 10th September 1891.

Read also—

Government of India Resolution No. 5 F., dated the 2nd March 1892.

RESOLUTION.

The Government of India have found indications in reports on famine relief received during recent years from various provinces that the policy of the Famine Commissioners, which was endorsed both by the Government of India and Her Majesty's Secretary of State, on the subject of wages on relief-works, has not always been fully appreciated. In view of the probability that there may be, during the next few months, a material expansion of relief-works in some parts of the country, and of the possibility that, in the event of the failure of the next monsoon, considerable demands may be made on the Government of India for funds to relieve distress, the Governor General in Council considers it advisable that the subject should be carefully considered, in view of the fact that in the case of widespread and severe famine any material departure from the principles of the Famine Commissioners' report may lead to financial embarrassment.

2. The views of the Famine Commissioners on questions relating to the employment of labour on relief-works are embodied in paragraphs 110 and 111, and again in paragraphs 126 to 136 of Part I of the Report. In the first place it should be noted that a distinction is made in these paragraphs between various classes of labourers. Although the different classes are not brought under any close definition, it is clear from the wording of paragraph 131 that labourers were to be classified according to their capabilities and that a broad line was intended to be drawn between able-bodied labourers doing accustomed work and able-bodied labourers doing unaccustomed work, and it may be noticed that in paragraph 132 the first class appear to be distinguished under the term "both able-bodied and skilful." "One or more piece-work gangs might," it is said, "be attached to each large relief work, in which all who are both able-bodied and skilful labourers should be classed and to which those who are improving in strength and skill may, if they wish it, be transferred. The rates should be so fixed (with reference to the price of food-grain) as to give a little more than the ordinary daily wage in return for the quantity of work likely to be performed."

3. The ordinary daily wage alluded to in this passage is not the daily wage which may be earned by a labourer on a public work in ordinary times, but the ordinary daily wage dealt with in the preceding paragraph (131), which is to be "adjusted from time to time so as to provide sufficient food for the labourer's support, allowing him one day's rest in the week." It is clear, therefore, that the intention of the Famine Commissioners was that skilled able-bodied labourers should not be permitted to perform an unlimited or indefinite amount of piece-work on a famine relief-work. The opposite

view has, been sometimes held. But it is obvious that any material departure from the Famine Commissioners' rule would result in unnecessary expenditure, and a rapid exhaustion of the programme of works available, for not only would greater numbers of labourers be attracted to the relief-works by a prospect of the high profits which unlimited piece-work would offer, but also the work performed by each labourer would be greater. The object of the Famine Commissioners, *viz.* to restrict the admission on relief-works to those who are compelled by necessity to come to them, would in fact be frustrated.

"Some safeguards," they urge in paragraph 110, "are essential in the interests of the destitute people no less than of the public treasury; and they are best found in laying down certain broad, self-acting tests by which necessity may be proved and which may, independently of any other rule of selection, entitle to relief the person who submits to them."

"The chief of these tests," they continue in paragraph 111, "and the only one which in our opinion it is ordinarily desirable to enforce, is the demand of labour commensurate in each case with the labourer's powers in return for a wage sufficient for the purposes of maintenance but not more;" and they point out again (in paragraph 132) that "it is not expedient to add to the outlay on relief or to the consumption of food beyond what is essential, and that no object is to be gained by the early completion of any work put in hand."

And again, in paragraph 127, it is intimated that, although State employment should be offered promptly, yet care must be taken "that the cost to which the community as a whole is put by the employment of persons in want is no more than the case strictly requires."

4. On the 9th of June 1883 the Government of India, after consulting Local Governments, circulated with an explanatory Resolution a Provisional Famine Code, based upon the recommendations of the Famine Commissioners, for the guidance of Local Governments and Administrations in the preparation of the Provincial Codes which they were invited to frame. It was explained that the scheme of the Famine Commissioners for the provision of employment of labour on relief-works was accepted by the Imperial Government, and the principles which they laid down were generally embodied in the Provisional Code.

5. Relief-works were in this Code required to be distinguished as—

(I) Civil Agency works; and

(II) Professional Agency works;

the former whether professionally managed or not being under the control of the district authority, and the latter under the control of the Public Works Department. Labourers were, reading sections 39 and 71 together, divided into four classes—

A.—Able-bodied persons accustomed to labour of the kind required at works coming under class II.

B.—Able-bodied persons accustomed to labour but not to labour of the kind required on works under class II.

C.—Able-bodied persons not accustomed to labour.

D.—Persons not able-bodied but fit for light employment of the kind required at works of class I.

Labourers of class A were (sections 71 and 72 of the Code) eligible for employment on Professional Agency works and for treatment as ordinary able-bodied labourers in public works. All others were to be dealt with under the rules for Civil Agency works.

6. Chapter X of the Provisional Code, which dealt with wages and rations on relief-works, prescribed a "full ration" sufficient to keep able-bodied labourers in health and strength, leaving it to Local Governments to suggest such modifications as might be required by the circumstances of each province. The "full wage" was defined as the amount of money which at the current prices is sufficient to purchase a "full ration." Section 132 laid down that payment for labour on Professional Agency works might be made at the rate ordinarily given under the rules in force in the Public Works Department, provided that the sum which a labourer can ordinarily be expected to earn by a fair day's labour shall in no case be less than the "full wage." This rule applied to labourers of class A only, since all other labourers were brought by section 72 of the Code under the rules for Civil Agency Works. It will be observed, however, that the wording of the rule prescribed the "full wage" as a minimum only, and placed no restriction on the amount which might be earned by a class A labourer at departmental rates for piece-work. An opening was thus left for a departure from the intention of the Famine Commissioners, that even skilful and able-bodied labourers should only receive "a little more than the ordinary wage," which would, in the terms of the ~~Famine Commissioners,~~ mean "a little more than the full wage." The object of the framers of the Code was, however, not to controvert the principles laid down by the Famine Commissioners and accepted by the Government of India, but to prevent undue restriction being placed on the progress of Public Works, of which, for special reasons, the early completion might be desirable. This has not been generally understood. Consequently, the result of the absence of any positive restriction on the wages of class A labourers has sometimes been that on earthwork, which is, wherever it can be provided, the most usual as it is the most appropriate relief-work, ordinary agricultural labourers have been considered to be sufficiently accustomed to the kind of labour required at the work to entitle them to be brought under class A, and to be given any amount of piece-work that the Public Works officer in charge of the work might deem to be desirable to secure the rapid and effective progress of the work itself. The principles laid down by the Famine Commissioners have thus been transgressed.

Provisional Famine Code

7. It has, on the other hand, occurred that the intention of the Famine Commissioners, that all skilful and able-bodied labourers should, for the reasons given in the passage quoted in paragraph 2 of this Resolution, receive a small margin above the full famine wage, has not been sufficiently appreciated; nor was this intention explained with sufficient distinctness in the Provisional Famine Code. The opportunity is now taken to give clear expression to the opinion of the Government of India that this consideration should be applied to all labourers of class A, and, subject to the remarks regarding the classification of ordinary cultivators which are made below in paragraph 10 of this Resolution, also to labourers of class B; money-wages and tasks being so adjusted from time to time as to admit of the labourers receiving "a little more than" the equivalent of the "full ration" of the Code.

8. In order, on the one hand, to secure the object which the framers of the Code had in view of preventing any undue restriction on the progress of a public work which is required as such independently of its use as a relief-work, and on the other, to prevent any transgression of the principles of the Code, which requires that no remuneration should be given to a labourer on a relief-work materially in excess of the amount sufficient to maintain health and

strength, it is desirable that, where this has not already been done, a rule to the following effect should be incorporated in the Provincial Code:

When a public work for which provision had already been made in the ordinary Public Works Budget of the year is included in the sanctioned list of Professional Agency works, the Local Government shall decide, in the event of its being utilized as a relief-work, whether any portion of it is of such a character, or requires to be executed with such urgency, as to demand the employment of ordinary public works labour at full piece-work rates. Such portion shall be separated from the portion utilized as a relief-work and shall not be opened to labourers admitted on the work simply for purposes of relief. On the portion retained as a relief-work the wages of able-bodied labourers, however skilled, shall not exceed the amount in money which is equivalent to a little more than the full famine wage.

9. Another direction in which a departure has been, in some cases, permitted from the principles laid down in the Provisional Famine Code, is in the expansion of money-wages for the purpose of providing a margin from which relief may be given to children and infirm dependents by their able-bodied parents or guardians who labour on relief-works. This was prohibited in the Provisional Code on the ground that experience had shown that starving parents cannot in times of severe famine safely be entrusted with the feeding of their children. The Government of India are not disposed to admit any modification of the principle which confines payment of a wage to those who work, and restricts its amount to a liberal money-equivalent of the subsistence ration to which the worker is in each case entitled. Any relaxation of the rule must lead to irregularity and wasteful expenditure. A margin adequate for the support of sick or infirm dependents in cases where they exist cannot, if given without discrimination to all able-bodied labourers, be otherwise than sufficiently large to prove unduly attractive to those who are free from such encumbrances. The provision, therefore, of any such margin must tend to destroy the value of the test which it was one of the main objects of the Famine Code scheme that relief-works should provide.

Recent experience in the Madras Presidency has tended to confirm the view that the system of famine kitchens and poor-houses for the support of the young and infirm is sound. In the event of serious famine the Government of India would be sorry to see it abandoned. But they are not prepared to insist absolutely on its adoption, especially in the earlier stages of distress, in those provinces where the proper relief of dependents by their guardians can be guaranteed; and if it is the wish of any Local Government or Administration that the original prohibition of relieving children and others through their parents and guardians should be modified or withdrawn, a separate communication on the subject may be submitted to the Government of India. But it must be distinctly understood that any allowance made for the support of dependents can only be permitted to those labourers who actually undertake the relief of their children or dependents; that it must be based upon a precise scale regulated in accordance with the number of dependents; and that all payments made for the purpose indicated should be shown in the accounts under the head of gratuitous relief.

10. Turning now to the subject of the division of labourers into classes, the Government of India find that much variety of practice exists in different provinces. This is partly due to a difference in the scale of famine rations

and wages assigned to each class, and partly to a difference of opinion as to the quality of the labour of those admitted to relief-works. The work most frequently given for purposes of relief is earthwork. It is argued by some of the authorities who deal with famine-relief that all agricultural labourers, including ordinary cultivators—men, women and children—are skilled and able-bodied; or, in the words of the Provisional Code, that they are able-bodied labourers accustomed to labour of the kind required at the works. The bulk of the labourers are thus brought into the highest class, *i.e.* class A of the Provisional Code. If this view be adopted and acted on, it is evident that the margin above a subsistence wage, or to use the words of the Famine Commissioners, the "little more than the ordinary daily wage," must be kept within narrow limits, and that wages should be carefully revised with every fluctuation of prices. If, on the other hand, as is the case in some provinces, only a very small percentage of labourers, such as old public works employés or others who have had professional experience, are admitted into class A, a more liberal margin may be permissible for that class, provided that, on the other hand, the wage of the B class is kept in closer approximation to the level of the subsistence wage of the Famine Code. In order that some general uniformity may be secured in the administration of famine-relief in different provinces, it is necessary that the Government of India should be provided with precise information as to the system on which classification of labourers is based, and as to the relation between the money-wage actually given and the money equivalent of the famine ration at current prices. Rules under which such information is to be periodically submitted are prescribed in Resolution No. 5, dated 2nd March 1892, on famine reports.

11. To sum up. Following the Famine Commissioners' recommendations labourers on relief-works may be classified according to their capability for work. The classes adopted in the Provisional Code are A, skilful and able-bodied accustomed to the kind of work required; B, able-bodied accustomed to work; C, able-bodied not accustomed to work; D, Others. Classes A and B may receive a full wage, *i.e.* a wage equivalent to a ration sufficient to keep an able-bodied labourer in health and strength, together with a margin. The margin may be more liberal for class A when it contains a small percentage than when it is allowed to include a large percentage of able-bodied labourers accustomed to work. The wage of class C will not exceed the full wage, and should be determined in general accordance with the principles of sections 133 and 134 of the Provisional Code. The wage may be given wholly in cash or partly in grain and partly in cash, but cash payments must be adjusted from time to time in accordance with prices of food. So much of a relief-work as requires to be pushed on for urgent reasons at a rapid rate should be removed from the list of relief-works and treat ed as n ordinary public work.

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Govt. of Madras.	Chief Commr., Central Provinces.
Do. Bombay.	Do., Burma.
Do. Bengal.	Do., Assam.
Do. N.-W. P. and Oudh.	Do., Coorg.
Do. Punjab.	Do., Ajmere-Merwara.
Secretary for Berar to the Resident at Hyderabad.	

Ordered also, that a copy be forwarded to the Foreign Department for information and communication to Political Officers in Native States, and to the Finance and Public Works Departments for information.

[True extract.]

E. C. BUCK,

Secretary to the Government of India.

File No. 44.
Serial No. 1.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

RESOLUTION.

Circular No. $\frac{6}{44}$.

Dated Calcutta, the 17th March 1892.

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1070 R. & A.—17-3-92.—972.—Jos. deC.

CIRCULAR No. $\frac{6}{44}$.

Extract from the Proceedings of the Government of India in the Revenue and Agricultural Department,— dated the 17th March 1892.

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RESOLUTION.

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3. The ordinary daily wage alluded to in this passage is not the daily wage which may be earned by a labourer on a public work in ordinary times, but the ordinary daily wage dealt with in the preceding paragraph (131), which is to be "adjusted from time to time so as to provide sufficient food for the labourer's support, allowing him one day's rest in the week." It is clear, therefore, that the intention of the Famine Commissioners was that skilled able-bodied labourers should not be permitted to perform an unlimited or indefinite amount of piece-work on a famine relief-work. The opposite

view has, been sometimes held. But it is obvious that any material departure from the Famine Commissioners' rule would result in unnecessary expenditure, and a rapid exhaustion of the programme of works available, for not only would greater numbers of labourers be attracted to the relief-works by a prospect of the high profits which unlimited piece-work would offer, but also the work performed by each labourer would be greater. The object of the Famine Commissioners, *viz.* to restrict the admission on relief-works to those who are compelled by necessity to come to them, would in fact be frustrated.

"Some safeguards," they urge in paragraph 110, "are essential in the interests of the destitute people no less than of the public treasury; and they are best found in laying down certain broad, self-acting tests by which necessity may be proved and which may, independently of any other rule of selection, entitle to relief the person who submits to them."

"The chief of these tests," they continue in paragraph 111, "and the only one which in our opinion it is ordinarily desirable to enforce, is the demand of labour commensurate in each case with the labourer's powers in return for a wage sufficient for the purposes of maintenance but not more;" and they point out again (in paragraph 132) that "it is not expedient to add to the outlay on relief or to the consumption of food beyond what is essential, and that no object is to be gained by the early completion of any work put in hand."

And again, in paragraph 127, it is intimated that, although State employment should be offered promptly, yet care must be taken "that the cost to which the community as a whole is put by the employment of persons in want is no more than the case strictly requires."

4. On the 9th of June 1883 the Government of India, after consulting Local Governments, circulated with an explanatory Resolution a Provisional Famine Code, based upon the recommendations of the Famine Commissioners, for the guidance of Local Governments and Administrations in the preparation of the Provincial Codes which they were invited to frame. It was explained that the scheme of the Famine Commissioners for the provision of employment of labour on relief-works was accepted by the Imperial Government, and the principles which they laid down were generally embodied in the Provisional Code.

5. Relief-works were in this Code required to be distinguished as—

(I) Civil Agency works; and

(II) Professional Agency works;

the former whether professionally managed or not being under the control of the district authority, and the latter under the control of the Public Works Department. Labourers were, reading sections 39 and 71 together, divided into four classes—

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D.—Persons not able-bodied but fit for light employment of the kind required at works of class I.

Labourers of class A were (sections 71 and 72 of the Code) eligible for employment on Professional Agency works and for treatment as ordinary able-bodied labourers in public works. All others were to be dealt with under the rules for Civil Agency works.

6. Chapter X of the Provisional Code, which dealt with wages and rations on relief-works, prescribed a "full ration" sufficient to keep able-bodied labourers in health and strength, leaving it to Local Governments to suggest such modifications as might be required by the circumstances of each province. The "full wage" was defined as the amount of money which at the current prices is sufficient to purchase a "full ration." Section 132 laid down that payment for labour on Professional Agency works might be made at the rate ordinarily given under the rules in force in the Public Works Department, provided that the sum which a labourer can ordinarily be expected to earn by a fair day's labour shall in no case be less than the "full wage." This rule applied to labourers of class A only, since all other labourers were brought by section 72 of the Code under the rules for Civil Agency Works. It will be observed, however, that the wording of the rule prescribed the "full wage" as a minimum only, and placed no restriction on the amount which might be earned by a class A labourer at departmental rates for piece-work. An opening was thus left for a departure from the intention of the Famine Commissioners, that even skilful and able-bodied labourers should only receive "a little more than the ordinary wage," which would, in the terms of the ~~Famine Com-~~ Provisional Famine Code
~~missioners,~~ mean "a little more than the full wage." The object of the framers of the Code was, however, not to controvert the principles laid down by the Famine Commissioners and accepted by the Government of India, but to prevent undue restriction being placed on the progress of Public Works, of which, for special reasons, the early completion might be desirable. This has not been generally understood. Consequently, the result of the absence of any positive restriction on the wages of class A labourers has sometimes been that on earthwork, which is, wherever it can be provided, the most usual as it is the most appropriate relief-work, ordinary agricultural labourers have been considered to be sufficiently accustomed to the kind of labour required at the work to entitle them to be brought under class A, and to be given any amount of piece-work that the Public Works officer in charge of the work might deem to be desirable to secure the rapid and effective progress of the work itself. The principles laid down by the Famine Commissioners have thus been transgressed.

7. It has, on the other hand, occurred that the intention of the Famine Commissioners, that all skilful and able-bodied labourers should, for the reasons given in the passage quoted in paragraph 2 of this Resolution, receive a small margin above the full famine wage, has not been sufficiently appreciated; nor was this intention explained with sufficient distinctness in the Provisional Famine Code. The opportunity is now taken to give clear expression to the opinion of the Government of India that this consideration should be applied to all labourers of class A, and, subject to the remarks regarding the classification of ordinary cultivators which are made below in paragraph 10 of this Resolution, also to labourers of class B; money-wages and tasks being so adjusted from time to time as to admit of the labourers receiving "a little more than" the equivalent of the "full ration" of the Code.

8. In order, on the one hand, to secure the object which the framers of the Code had in view of preventing any undue restriction on the progress of a public work which is required as such independently of its use as a relief-work, and on the other, to prevent any transgression of the principles of the Code, which requires that no remuneration should be given to a labourer on a relief-work materially in excess of the amount sufficient to maintain health and

strength, it is desirable that, where this has not already been done, a rule to the following effect should be incorporated in the Provincial Code:

When a public work for which provision had already been made in the ordinary Public Works Budget of the year is included in the sanctioned list of Professional Agency works, the Local Government shall decide, in the event of its being utilized as a relief-work, whether any portion of it is of such a character, or requires to be executed with such urgency, as to demand the employment of ordinary public works labour at full piece-work rates. Such portion shall be separated from the portion utilized as a relief-work and shall not be opened to labourers admitted on the work simply for purposes of relief. On the portion retained as a relief-work the wages of able-bodied labourers, however skilled, shall not exceed the amount in money which is equivalent to a little more than the full famine wage.

9. Another direction in which a departure has been, in some cases, permitted from the principles laid down in the Provisional Famine Code, is in the expansion of money-wages for the purpose of providing a margin from which relief may be given to children and infirm dependents by their able-bodied parents or guardians who labour on relief-works. This was prohibited in the Provisional Code on the ground that experience had shown that starving parents cannot in times of severe famine safely be entrusted with the feeding of their children. The Government of India are not disposed to admit any modification of the principle which confines payment of a wage to those who work, and restricts its amount to a liberal money-equivalent of the subsistence ration to which the worker is in each case entitled. Any relaxation of the rule must lead to irregularity and wasteful expenditure. A margin adequate for the support of sick or infirm dependents in cases where they exist cannot, if given without discrimination to all able-bodied labourers, be otherwise than sufficiently large to prove unduly attractive to those who are free from such encumbrances. The provision, therefore, of any such margin must tend to destroy the value of the test which it was one of the main objects of the Famine Code scheme that relief-works should provide.

Recent experience in the Madras Presidency has tended to confirm the view that the system of famine kitchens and poor-houses for the support of the young and infirm is sound. In the event of serious famine the Government of India would be sorry to see it abandoned. But they are not prepared to insist absolutely on its adoption, especially in the earlier stages of distress, in those provinces where the proper relief of dependents by their guardians can be guaranteed; and if it is the wish of any Local Government or Administration that the original prohibition of relieving children and others through their parents and guardians should be modified or withdrawn, a separate communication on the subject may be submitted to the Government of India. But it must be distinctly understood that any allowance made for the support of dependents can only be permitted to those labourers who actually undertake the relief of their children or dependents; that it must be based upon a precise scale regulated in accordance with the number of dependents; and that all payments made for the purpose indicated should be shown in the accounts under the head of gratuitous relief.

10. Turning now to the subject of the division of labourers into classes, the Government of India find that much variety of practice exists in different provinces. This is partly due to a difference in the scale of famine rations

and wages assigned to each class, and partly to a difference of opinion as to the quality of the labour of those admitted to relief-works. The work most frequently given for purposes of relief is earthwork. It is argued by some of the authorities who deal with famine-relief that all agricultural labourers, including ordinary cultivators—men, women and children—are skilled and able-bodied; or, in the words of the Provisional Code, that they are able-bodied labourers accustomed to labour of the kind required at the works. The bulk of the labourers are thus brought into the highest class, *i.e.* class A of the Provisional Code. If this view be adopted and acted on, it is evident that the margin above a subsistence wage, or to use the words of the Famine Commissioners, the "little more than the ordinary daily wage," must be kept within narrow limits, and that wages should be carefully revised with every fluctuation of prices. If, on the other hand, as is the case in some provinces, only a very small percentage of labourers, such as old public works employés or others who have had professional experience, are admitted into class A, a more liberal margin may be permissible for that class, provided that, on the other hand, the wage of the B class is kept in closer approximation to the level of the subsistence wage of the Famine Code. In order that some general uniformity may be secured in the administration of famine-relief in different provinces, it is necessary that the Government of India should be provided with precise information as to the system on which classification of labourers is based, and as to the relation between the money-wage actually given and the money equivalent of the famine ration at current prices. Rules under which such information is to be periodically submitted are prescribed in Resolution No. 5, dated 2nd March 1892, on famine reports.

11. To sum up. Following the Famine Commissioners' recommendations labourers on relief-works may be classified according to their capability for work. The classes adopted in the Provisional Code are A, skilful and able-bodied accustomed to the kind of work required; B, able-bodied accustomed to work; C, able-bodied not accustomed to work; D, Others. Classes A and B may receive a full wage, *i.e.* a wage equivalent to a ration sufficient to keep an able-bodied labourer in health and strength, together with a margin. The margin may be more liberal for class A when it contains a small percentage than when it is allowed to include a large percentage of able-bodied labourers accustomed to work. The wage of class C will not exceed the full wage, and should be determined in general accordance with the principles of sections 133 and 134 of the Provisional Code. The wage may be given wholly in cash or partly in grain and partly in cash, but cash payments must be adjusted from time to time in accordance with prices of food. So much of a relief-work as requires to be pushed on for urgent reasons at a rapid rate should be removed from the list of relief-works and treated as an ordinary public work.

ORDER.—Ordered that a copy be forwarded to the Local Governments and Administrations noted in the margin for information and guidance.

Govt. of Madras.		Chief Commr., Central Provinces.	
Do.	Bombay.	Do.,	Burma.
Do.	Bengal.	Do.,	Assam.
Do.	N.-W. P. and Oudh.	Do.,	Coorg.
Do.	Punjab.	Do.,	Ajmere-Merwara.
Secretary for Berar to the Resident at Hyderabad.			

Ordered also, that a copy be forwarded to the Foreign Department for information and communication to Political Officers in Native States, and to the Finance and Public Works Departments for information.

[True extract.]

E. C. BUCK,

Secretary to the Government of India.

highest wage allowed in Bombay, when prices are respectively 12 seers a rupee (about the present rate) and 6 seers a rupee (a severe famine rate) :—

Price of grain ruling.	WAGES ESTIMATED WHOLLY IN CASH.				WAGES ESTIMATED WHOLLY IN GRAIN.			
	Madras.			Bombay.	Madras.			Bombay.
	Class I.	Class II.	Class III.	All classes.	Class I.	Class II.	Class III.	All classes.
	A. p.	A. p.	A. p.	A. p.	lb	lb	lb	lb
12 seers a rupee . . .	2 6	2 0	1 7	1 6	$\frac{3}{4}$	3	$2\frac{3}{8}$	$2\frac{1}{4}$
6 seers a rupee . . .	3 6	3 0	2 5	3 0	$2\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{13}{16}$	$2\frac{1}{4}$

The above figures show that the Bombay wage becomes equivalent to the Madras second class wage when famine prices are ruling, and in view of the facts that very few labourers are in Madras placed in the first class, and that in Bombay the highest wage (*i.e.* the equivalent of $2\frac{1}{4}$ lb jowari) is payable to all able-bodied labourers of whatever class, it may be said generally that, under severe famine conditions which were contemplated when the Codes were framed, the actual wages given to the bulk of famine labourers in Bombay and Madras would become almost the same.

4. The explanation which in the Resolution referred to in paragraph 1 is given of the Famine Commissioners' policy indicates that, prices being the same, there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or, prices being different, between the famine ration of one province and the famine ration of another. Nor, again, should there be any material difference within the same province between the famine ration of one period and that of another. Discrepancies will be completely avoided by adherence to the Famine Commissioners' principle. The full wage must never exceed by more than a small margin, the money equivalent of a full subsistence ration sufficient to keep an able-bodied labourer in health and strength. In this view the most convenient plan would appear to be that adopted in the Provisional Code, *i.e.* first to decide what is the full ration sufficient to keep an able-bodied labourer in health and strength, and then to deduce the money equivalent from it as the basis of the full wage.

5. If there is reason to believe that, as a rule, the prices of condiments vary *pari passu* with the price of grain, the Bombay system of adopting a single grain as the basis of calculation is fair enough. If, however, the price of condiments has any recognised tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage.

6. I am to add that nothing in the Resolution on wages or in this letter is intended to convey any objection to the payment of the wage wholly or partly in cash.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

LOCAL.

ENCLOSURE.

XXXII.—*Revenue.*

Civil Works.

INCORPORATED LOCAL FUNDS.

PROVINCIAL SERVICES.	Accounts, 1890-91.			Budget estimate, 1891-92.			Revised estimate, 1891-92.			Budget estimate, 1892-93.		
	Public Works in charge of civil officers.	Public Works in charge of departmental officers.	Total.	Public Works in charge of civil officers.	Public Works in charge of departmental officers.	Total.	Public Works in charge of civil officers.	Public Works in charge of departmental officers.	Total.	Public Works in charge of civil officers.	Public Works in charge of departmental officers.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Land Revenue	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Stamps	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Excise	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Provincial Rates	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Miscellaneous	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Civil Works	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Total	8,60,364	1,30,878	9,91,242	8,42,424	18,000	8,60,424	8,40,000	18,000	8,58,000	8,40,000	18,000	8,58,000
Deficit	1,28,735	1,00,000	2,28,735	35,23,000	8,09,000	43,32,000	29,00,000	4,20,000	33,20,000	23,00,000	6,30,000	29,30,000
Surplus	21,813	7,000	28,813	7,000	1,07,000	1,14,000	1,18,000	23,000	1,41,000	1,18,000	22,000	1,40,000

45.—*Expenditure.*

Civil Works.

Land Revenue	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Stamps	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Excise	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Provincial Rates	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Miscellaneous	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Civil Works	1,43,394	21,813	1,65,207	1,40,404	3,000	1,43,404	1,40,000	3,000	1,43,000	1,40,000	3,000	1,43,000
Total	8,60,364	1,30,878	9,91,242	8,42,424	18,000	8,60,424	8,40,000	18,000	8,58,000	8,40,000	18,000	8,58,000
Deficit	1,28,735	1,00,000	2,28,735	35,23,000	8,09,000	43,32,000	29,00,000	4,20,000	33,20,000	23,00,000	6,30,000	29,30,000
Surplus	21,813	7,000	28,813	7,000	1,07,000	1,14,000	1,18,000	23,000	1,41,000	1,18,000	22,000	1,40,000

Office-note from the Examiner, P.W. Accounts, dated 16th March 1892, No. 393 S.A.
" " " " " 7th April " " 517 "
" " " " " 13th " " " 562 "
" " " Chief Engineer for Irrigation " 13th " " " 117.

ORDER—dated 25th April 1892, No. 1300 W., Public Works.

The revised and budget estimates of revenue and expenditure under Provincial Civil Works for 1891–92 and 1892–93, respectively, as shown in the statement appended to the Resolution of the Government of India recorded above, have been adopted in the final issue of the budget.

2. The revised estimate of charges for 1891–92, as shown in the preliminary budget, amounted to Rs. 31,00,000, but the restriction of expenditure in consequence of special orders reduced the amount to Rs. 29,00,000.

3. Items 43, 55 and 56 of the preliminary budget have been eliminated from the final issue, allotments to the extent of the sanctioned estimates having subsequently been provided in 1891–92.

4. The grants for items 15, 32, 56 and 61 have been reduced so as to correspond with the unspent balance of the sanctioned estimates in each case.

5. With reference to G.O., No. 1093 W., dated 4th April 1892, a sum of Rs. 6,280 has been provided for the construction of a ward with out-houses for civil debtors in the Central Jail at Vellore and the allotment of Rs. 8,300 provided in the preliminary budget for alterations and additions to the entrance gate of the jail has been withdrawn.

6. An allotment of Rs. 20,000, has been provided for the construction of lines for the men of His Excellency the Governor's Body Guard at Madras against the sanctioned estimate of Rs. 30,653. The amount will be placed at the disposal of the Chief Engineer, Military Works, Madras Command, who will report whether the balance of the estimate will be required before the close of the official year.

7. A sum of Rs. 5,000 has been reserved in the budget for the conservation of archæological works. From this sum Rs. 600 will be placed at the disposal of the Superintendent of Archæological Survey. Superintending Engineers will submit detailed proposals for utilising the balance.

8. The allotments applied for by the Chief Engineer, Military Works, Madras Command, for expenditure on minor works and repairs at Bangalore and Wellington have been provided in part II of the budget, where the distribution of the grants under these heads is shown. The grants for tools and plant are distributed in part IV.

9. The amount reserved in the budget for incomplete works will, as usual, be allotted in detail on receipt of proposals from Superintending Engineers and the Consulting Architect. These should be submitted as early as possible and before the 15th May next.

10. Superintending Engineers should lose no time in the submission of plans and estimates for the unsanctioned works for which funds have been provided in the budget.

11. With these remarks, the final issue of the Provincial Civil Works budget for 1892-93 will be printed and circulated for the information and guidance of the officers concerned and 35 copies, as shown in the margin, will be forwarded to the Government of India, Public Works Department.

To Simla—10
„ Calcutta—25

(Here enter No. 1301 W., Public Works, dated 25th April 1892.)

(True Extract.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
„ the Consulting Architect to Government.
„ the Chief Engineer for Irrigation.
„ the Examiner, Public Works Accounts.
„ the Financial Department.
„ the Judicial Department.
„ the Educational Department.
„ the Public Department.
„ the Revenue Department.
„ the Military Department.
„ the Chief Engineer, Military Works, Madras Command.

ENDORSEMENT—dated 25th April 1892, No. 1301 W., Public Works.

Forwarded.

(By Order.)

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. A. D. Xavier.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1892} Madras.

PUBLIC WORKS.

Dated April, 25th.

Read. *Encl.*

G.O., 25th April 1892, Nos. 1300, 1301 W.

APRIL.

Provincial Civil Works Budget for 1892-93

Forwarding to the Government of India copies of the final issue of the —.

File No. 44.
Serial No. 2.

1892.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

FAMINE.

To THE SECRETARY TO THE GOVERNMENT OF MADRAS.

10 Sc to Encls
P.W. 3955/92

No. 498/44.

Rev & A
No. 1890
26-4-92

Dated Calcutta, the 17th March 1892.

G.O No. 1219 W
12/4/92

SUBJECT.

WAGES on Famine Relief Works.

Government of India Central Printing Office.—No. 1399 R. S. A.—18-3-92.—152.—Jos. DeC.

No. $\frac{498}{44}$.

FROM

SIR E. C. BUCK, KT.,
Secretary to the Government of India,

To

THE SECRETARY TO THE GOVERNMENT OF MADRAS.

Revenue and Agricultural Department.
Famine.

CALCUTTA, the 17th March 1892.

SIR,

IN communicating Circular Resolution No. $\frac{6}{44}$, dated the 17th instant, relating to wages on famine relief works, I am directed to convey the following remarks on the provisions of the Madras Famine Code dealing with the same subject.

2. The classification of labourers in the Madras Code appears to be somewhat indefinite. Class I of section 19 could, if the views of many authorities are accepted, be made to include the bulk of the agricultural population who are said to be accustomed, in the prosecution of the ordinary business of their life, to manual labour of the kind required at works where digging and carrying earth is the chief employment offered. The Government of India do not wish to lay down any rule on this question, but merely to point out that section 19 of the Madras Code is open to an interpretation which would make it difficult to decide that the wage of class I could not be awarded to the majority of labourers on relief works. They are aware that this is not done in practice and believe that a large number of labourers on the relief works opened in the Madras Presidency are brought under the third class. On this point information has not yet been definitely received, but has been called for in connection with the monthly report for February.

3. Turning now to the scale of wages, I am to ask that the desirability of allowing any part of the wage to be estimated in money may be very carefully considered. The schedule of wages framed in section 185 of the Code was drawn up in anticipation of a condition of prices which does not now prevail, and which, in view of the improvement of railway communications, is not perhaps likely again to occur. The rates of wages permissible under the Madras Code for classes I, II and III of section 185 are compared below with the

highest wage allowed in Bombay, when prices are respectively 12 seers a rupee (about the present rate) and 6 seers a rupee (a severe famine rate) :—

Price of grain ruling.	WAGES ESTIMATED WHOLLY IN CASH.				WAGES ESTIMATED WHOLLY IN GRAIN.			
	Madras.			Bombay.	Madras.			Bombay.
	Class I.	Class II.	Class III.	All classes.	Class I.	Class II.	Class III.	All classes.
	A. p.	A. p.	A. p.	A. p.	lb	lb	lb	lb
12 seers a rupee . . .	2 6	2 0	1 7	1 6	$\frac{3}{4}$	3	$2\frac{3}{8}$	$2\frac{1}{4}$
6 seers a rupee . . .	3 6	3 0	2 5	3 0	$2\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{13}{16}$	$2\frac{1}{4}$

The above figures show that the Bombay wage becomes equivalent to the Madras second class wage when famine prices are ruling, and in view of the facts that very few labourers are in Madras placed in the first class, and that in Bombay the highest wage (*i.e.* the equivalent of $2\frac{1}{4}$ lb jowari) is payable to all able-bodied labourers of whatever class, it may be said generally that, under severe famine conditions which were contemplated when the Codes were framed, the actual wages given to the bulk of famine labourers in Bombay and Madras would become almost the same.

4. The explanation which in the Resolution referred to in paragraph 1 is given of the Famine Commissioners' policy indicates that, prices being the same, there should be no essential difference at any time between the famine wage of one province and the famine wage of another, or, prices being different, between the famine ration of one province and the famine ration of another. Nor, again, should there be any material difference within the same province between the famine ration of one period and that of another. Discrepancies will be completely avoided by adherence to the Famine Commissioners' principle. The full wage must never exceed by more than a small margin, the money equivalent of a full subsistence ration sufficient to keep an able-bodied labourer in health and strength. In this view the most convenient plan would appear to be that adopted in the Provisional Code, *i.e.* first to decide what is the full ration sufficient to keep an able-bodied labourer in health and strength, and then to deduce the money equivalent from it as the basis of the full wage.

5. If there is reason to believe that, as a rule, the prices of condiments vary *pari passu* with the price of grain, the Bombay system of adopting a single grain as the basis of calculation is fair enough. If, however, the price of condiments has any recognised tendency to remain more constant than that of food-grains, it would seem desirable to set out a ration in terms of grain and condiments which should be converted with every material change of prices into a new money wage.

6. I am to add that nothing in the Resolution on wages or in this letter is intended to convey any objection to the payment of the wage wholly or partly in cash.

I have the honour to be,

SIR,

Your most obedient Servant,

E. C. BUCK,

Secretary to the Government of India.

No. 1024 G.

GOVERNMENT OF IDNIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

Dated ~~Calcutta~~ Simla, the 5th April 1892.

1394/1

Rates of contribution for leave and pension allowances payable by subordinates of the Public Works Department transferred to the service of Railway Companies before the 7th January 1889.

Read—

Public Works Department Resolution No. 2852 G., dated 30th October 1891.

RESOLUTION.—It is observed that the application of clause I of the above Resolution to the case of subordinates lent to Railway Companies, whose appointments are changed, will frequently result in a reduction of the amount of pension on account of which contribution had been previously paid. In modification therefore of the previous orders, the Governor General in Council is pleased to rule that such subordinates shall be allowed the option of contributing one-eighth of the net pay drawn immediately before their appointment was changed, for pension only, instead of one-eight of their assumed pay under Article 809 (*a*) (ii) of the Civil Service Regulations, the option to be exercised, once for all, when the change of appointment takes place.

The payment of future leave allowances in such cases will be governed by the "rule of proportions," the share payable by Government being reckoned on the period ending with the date on which the new rates are applied.

ORDER.—Ordered, that the above Resolution be forwarded to the Local Governments, Administrations and Officers noted in the margin, for information and guidance.

The Governments of Madras and Bombay, Public Works Department, General and Railway Branches.
The Governments of Bengal, the North-Western Provinces and Oudh, and the Punjab.
The Chief Commissioners of the Central Provinces, Burma, Assam, and Coorg.
The Resident at Hyderabad.
The Agents to the Governor General for Central India, Rajputana, and Baluchistan.
The Accountant General, Public Works Department.
The Director General of Railways.
The Consulting Engineers to the Government of India for Railways, Calcutta, Central Division, and Lucknow.
The Director General of Telegraphs.

By order,

G. Walker

Under Secy. to the Govt. of India.

Documents accompanying.

Nil.

G. C. Press, Simla—No. 35 P. W. D.—9·4·92—1,800.

To

The Secretary to the Government of Madras
Public Works Department.

WK80

4376

805.C

Rego: 25-4-92

P.W.R.

Proceedings of the Madras Govt

Read the following

13TH APRIL 1892, No. 364, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 30th March 1892, No. 254:—

MR. CLOGSTOUN.

Read—the following letter from H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated Ammápet, 21st March 1892, Ref. on No. 788-R.G.:—

As requested in your Reference on No. 476-Bd., dated 2nd instant, I have the honour to submit my report on the Bhaváni taluk.

2. *Markets.*—There are 11 markets. From Deputy Collector Mr. Narayanasami Aiyer's inquiries they appear to be well supplied with food-grains. The markets supply the inhabitants of the taluk with all the food-grain they require.

3. *Roads.*—The greater portion of the taluk is well served with roads. The road from Nerinjipet to Samballi is reported to be in bad order, and that from Samballi to Kaveripuram to be almost impassable even for country carts. The markets at Samballi and Kaveripuram appear, however, to be supplied chiefly from the Salem district.

People in these sparsely populated localities seem to depend more on local stocks than markets for grain, and these are not yet exhausted. Ragi comes from Kollegál also.
(Intld.) J. S.

4. *Number of persons requiring relief.*—The Tahsildar's estimate is as follows:—

Pariahs	480
Chucklers	200
Padiyachis	600
Vetuvars	250
Weavers	100
Tottiyars	50
Others	420
Total ...	2,100

The Deputy Collector thinks that between 3,000 and 4,000 persons may require relief, if the season does not improve.

With the exception of the weavers, regarding whom I shall submit a separate report, I have seen no signs of actual distress at present; but as prices are very high, and the purely dry crops have almost entirely failed in the villages near the Palamalai Hills, it is almost certain that the labouring classes feel the want of labour. I would suggest, therefore, that two or three relief works be opened as a test measure. If this be done, the attendance at the works will show whether further relief is required.

5. *Relief works.*—Out of the list of available Local Fund works, which you sent, the Tahsildar has selected six, viz.:—

(1) Road from Audiyur to Ammápet.
(2) Do. do. to Attani.
(3) Do. Mailambadi to Olagadam.
(4) Do. do. to Tirupúr.
(5) Do. Nerinjipet to Kaveripuram.
(6) Do. Audiyur to Chellampalaiyam.

The selection is a good one, and will supply work for all who are likely to require relief. For the present, however, it is only necessary to start work on Nos. 1 and 5, Andiyur to Ammapet and Nerinjipet to Kaveripuram.

Work may consist of—

(1) Clearing road margins of prickly-pear and defining the road limits.
(2) Digging side channels.
(3) Collection, breaking and stacking of metal.

I would further suggest that good wells be constructed at suitable intervals along the roads. They will supply water for the coolies and for the road work, and will be useful afterwards for travellers. The road from Nerinjipet to Kaveripuram runs for the first 15 miles as far as Samballi, within a short distance of the Cauvery; this portion of the road may therefore be metalled.

6. The Tahsildar suggests that the repair of tanks may be undertaken as relief works. He does not, however, say what tanks should be repaired, and has no estimates ready. Tanks are not so useful as wells for contending against famine. Unless therefore the Executive Engineer can recommend any tanks for repair, I do not think any money should be spent on tanks.

7. *Advances to landed classes.*—Beyond loans under the Land Improvement Loans Act and the Agriculturists' Loans Act no advances are at present required. For loans under the former Act, Rs. 10,000 and for loans under the second Act Rs. 3,000 may for the present be allotted. Many owners of garden lands want loans for the purchase of working cattle, and it is advisable, I think, that they should be allowed to borrow the necessary funds from Government.

8. I enclose Bhavâni Tahsildar's report No. 548-Gl. Series of 11th March 1892, with the remark that the figures in paragraph 3 (*a*) are *not* the normal prices, but the lowest prices obtainable during the past six months.

9. *Gratuitous relief.*—The Tahsildar, you will see, says that no such relief is required at present. You have recently sanctioned such relief to a poor family at Andiyur. Of course in every village there are two or three persons who are unable to work and find a difficulty in living. I have instructed the Tahsildar to send without delay a list, in the form given in section 56 of the Famine Code, of all persons entitled to gratuitous relief; and if, after further inquiry, I find there are persons entitled to such relief, I will submit the necessary proposals.

Endorsement by J. STURROCK, Esq., Collector of Coimbatore, dated 27th March 1892, Ref. on No. 557-Sub.

Forwarded with reference to paragraph 3 of Board's Proceedings, dated 22nd February 1892, No. 135. I also enclose an extract from a later letter from Mr. Moberly and send in original with its enclosure his letter, dated 26th March 1892, forwarding Deputy Collector M.R.Ry. Narayanasami Iyer's report on the taluk. I shall address the Board separately regarding the weavers.

2. The tract now affected is almost the same as that reported on in my letter recorded with Board's Proceedings, dated 25th September 1891, No. 612, when I obtained permission to start relief works pending the harvesting of the north-east monsoon crops. When I closed those works on the 15th January last, I reported that the crops were so bad that it would be necessary to re-open the works as soon as the private work in connection with the harvest—such as it was—came to an end, and I have reported the same in my monthly season reports for January and February. During all this time the Tahsildar has been reporting, week by week, that there was no work available for labourers, as the harvest work was being done by the ryots themselves. I knew, however, that there was a great demand for labour for the abundant wet crop in the adjoining taluk of Satyamangalam, and as the condition of the people was said to be still good, the time for re-opening the works did not seem to have arrived until I saw Mr. Moberly yesterday. In his letter of the 21st instant, forwarded with this endorsement, he speaks only of opening works as a test measure, but in his letter of the 25th, of which I send an extract, he states that his personal inquiries

have convinced him that it is very necessary that relief works should be opened at once, and on talking over matters yesterday I decided, in consideration of the time which must necessarily elapse in arranging preliminaries, to ask by telegram for permission to open the works specified in paragraph 10 of my letter, recorded with Board's Proceedings, dated 22nd February 1892, No. 135.

3. With regard to the state of the Nerinjipet firka, which was treated as distressed at the close of last year, although even there a few villages were, and are, in fairly prosperous state, I need add nothing to what is said in my former letter * beyond noting the outturn this year as compared with the admittedly bad outturn of the previous year:—

* Board's Proceedings, dated 25th September 1891, No. 612.

	1890–91.	1891–92.
... ...	146	...
20 annas	2,014	287
16 do.	18,385	5,085
8 do.	15,897	18,482
4 do. (withered)		9,225
Total ...	36,472	33,079

Now that such work, as has been afforded by the local harvest and by that in Satyamangalam is over, it is obvious that relief works must be more necessary now than before.

4. In addition to the Nerinjipet firka the Tahsildar would now class, as distressed, 14 villages of the Bhavâni firka and 12 villages of the Andiyur firka. Deputy Collector M.R.Ry. Narayanasami Iyer, however, includes only seven villages of the Andiyur firka in his list of distressed villages, and the Sub-Collector accepts his view generally. Mr. Moberly had not time before his transfer to inspect the worst portion of the Bhavâni firka, but from what I saw of the state of the crops in November last, and having regard to the outturn statement for four years, it is clear that these villages are much better off than those of the Nerinjipet firka, and relief measures there are not as yet called for.

5. The following figures show the outturn for four years in the six villages of the Andiyur firka which Mr. Moberly considers the most distressed:—

	1888–89.	1889–90.	1890–91.	1891–92.
.. ..	23	4	..	..
20 annas	2,927	7,358	4,531	179
16 do.	4,961	1,462	4,215	1,895
8 do.	509	..	374	3,853
4 do.	23	..	17	2,067
Withered				
Total ..	8,443	8,824	9,137	7,994

These figures disclose for the current year a considerable falling off in cultivation and a very large area of crop which either withered or gave a poor outturn, but the outturn last year was decidedly good, and very much better the year before, and as all reports go to show that though people are asking for work, there are no signs of emaciation and the markets are mainly supplied from local sources. I cannot admit that there is as yet any necessity for starting relief works in the Andiyur firka. As however one of the works which I propose to start for the Nerinjipet firka extends to Andiyur, it will serve as a test work for that firka.

6. The Tahsildar, who considers that the distress affects a population of over 50,000, estimates the number likely to require relief at 2,100. The Deputy Collector, out of a much smaller population, puts the number at from 3,000 to 4,000. Though I regard as distressed only a portion of the Nerinjipet firka with a population under 20,000, it is to be borne in mind that there are some people badly off in many other

villages within a reasonable distance of the works, and I can form no estimate of the possible influx from the Salem district on the other side of the river along which the most important of the works will run. Last year when the works were the same as I now propose to open, the highest figure was 1,521 immediately after the work was opened. As tasking was got into proper order, the numbers fell rapidly and never afterwards rose beyond 675. If the kar and south-west monsoon rains come in due course, and we have at present no reason to assume that they will not, I do not see that we need anticipate having to provide work for an average of more than 1,500 until the south-west monsoon crops are ready for reaping about six months hence. Unless there is a further failure of rain, prices * are not likely to rise much, and Rs. 150 a day, or Rs. 27,000 for six months, will probably meet all requirements. The unexpended portions of the estimates of the two selected works are as follows:—

* 26th March—

Rice	9·95
Cholum	12.18
Ragi	13·94
Cumbu	15·90

	Rs.
Ammapet-Cauveripuram road	23,763
Ammapet-Andiyur road	6,069
Total ...	29,832

so that no more works are likely to be required. There are no irrigation works available. One of the schemes mentioned by the Deputy Collector is shown by Mr. Moberly to be impracticable, and the Cauveripuram one is unsuitable as it is situated in the most remote and sparsely populated corner of the affected tract.

7. I do not think it necessary to add much more to what the Sub-Collector has said. Gratuitous relief is obviously not required as yet. The case referred to by the Sub-Collector is one which ordinarily would have been left to private charity, but at present it seemed dangerous to rely on that resource, and as a family suddenly left destitute by the death of the bread winner in Andiyur—outside the distressed tract—was in danger of starvation, I authorized the taluk magistrate to advance what was necessary for bare subsistence and debit the charge to magisterial contingencies. There is no danger any where of failure of supplies. The distress is due merely to a number of people having no stocks of their own, no money with which to buy grain, and no means of obtaining it. To relieve this, all that is necessary is to start relief works, and if this is done soon, we will have good work in return for what we spend. Dry fodder is still available for cattle and loans for wells are being freely given. A special report about the condition of the weavers will be submitted shortly.

ENCLOSURE No. 1.

From H. MOBERLY, Esq., Acting Sub-Collector, Coimbatore, to the Collector of Coimbatore, dated 25th March 1892, Ref. No. 151, Mis.

In your reference on No. 227-Sub. of 1892, you called for a report on the labouring classes in Bhavâni taluk. I have consulted the Police Inspector, the Tahsildar, Deputy Collector Mr. Narayanasamier, who has sent a very interesting report based on personal inquiries and I have just returned from a tour as far as Sampalli, having visited as many villages as possible and made all possible inquiries.

2. The Police Inspector reports that only people residing within the limits of the Bhavâni, Andiyur and Athani Police stations went to Satyamangalam for the paddy harvest; that the labouring classes in the Nerinjipet firka were not able to go to Satyamangalam on account of the distance, and that they are suffering from want of labour. He further reports that, with the exception of a few villages in the limits of Bhavâni and Andiyur Police stations, the crops were so poor that the ryots could not afford to employ coolies to cut, carry and thresh the crops.

3. The Tahsildar's report is to the same effect. He states that the labouring classes say that the relief works which were opened last year afforded relief, but that since they were closed they have suffered much.

4. My personal inquiries convinced me that it is very necessary that relief works should be opened at once. With the exception of the weavers, the labouring classes look fairly well nourished; but one cannot rely on appearances. Many of the labouring classes have been

obliged to pawn or sell not only their jewels but even their brass domestic utensils in order to buy grain for food, and this shows that relief is required. At present, we have no walking skeletons stalking about; but we should not wait till the people are reduced to that condition. If we wait till then, they will not be able to give a proper outturn of work, whereas at present they can work and are willing to work. I therefore beg most earnestly to impress upon you the necessity of opening relief-works at once. Work on the road from Nerinjipett to Cauveripuram, and from Ammapet to Andiyur will afford relief to the people in the worst affected tracts. I would also suggest that ordinary work be started on the road from Andiyur to Athani and from Andiyur to Sellampalaiyam, so as to afford relief to the poorer classes in the west part of the taluk.

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ENCLOSURE No. 2.

From H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated 26th March 1892, Ref. No. 788 R.G.

In continuation of my letter, Reference No. 788 R.G., dated 21st March 1892, regarding the condition of the labouring classes in Bhavâni taluk, I have the honour to forward, in original, Deputy Collector Mr. Narayanasami Iyer's report No. M—Camp of 11th instant. I am much indebted to that gentleman for his careful inquiries and his painstaking report.

2. A few remarks on portions of his report are necessary.

Para. 2.—The ryots did not appreciate the rains which fell on 28th February. They deemed it unseasonable as it would bring up the whiteants and they would destroy what little grass there was. The whiteants have come up and destroyed much of the grass.

Para. 3.—It is necessary, I think, to provide relief for five months certainly. Even if we have showers in April and May and a good south-west monsoon most of the labouring classes will want work. The preparing of the ground and the sowing will not take many days, and the labouring classes will have no work, while the crops are growing. Very few have any stock of grain, and those who have no stock will not in the absence of relief works, have the wherewithal to buy food.

Para. 4.—In this district more than in any district I know, the people are so wedded to their caste and other prejudices, that they would do anything—even die—rather than undertake work which their caste prejudices are opposed to. We must take them as we find them and give them work which they have no objection to undertake. The figures given by the Deputy Collector show that the Tahsildar has been giving his special attention to loan applications, and from what I have seen of his work lately, I am certain he is doing his best to dispose of applications as quickly as possible.

Para. 5.— I have recommended work on the roads from Ammapet to Kaveripuram and Ammapet to Andiyur.

3. A road from Buthapadi market to Mailambadi is not necessary as the Local Fund Engineer has proposed a road from Mailambadi to Theruppur, which will cross the Ammapet-Andiyur road.

4. The proposal to repair four tanks in Mulakkadu, Sampalli and Kolathur is condemned by the ryots and need not be investigated. See my remarks on enclosure 2 to Deputy Collector's letter.

5. The scheme to restore a ruined tank in Kaveripuram, I have not been able to look into. It does not seem very hopeful. Besides wells are better than tanks for contending against famine.

Para. 6.—The "Sammanjee" cloth of the Deputy Collector should be Sannanji (narrow border). The cloth he mentions is an extraordinarily large one and so more expensive than the one I have proposed. The "Thirunagesvaram" cloth I found on inquiry to be too elaborate for our purposes, so I left it out of consideration.

Para. 10. *Fodder.*—I agree with the Deputy Collector. There are stacks of dry fodder all over the place, so at present there is no scarcity of dry fodder.

ENCLOSURE No. 3.

From M R.Ry T. V. NARAYANASAWMY AIYAR Avergal, Deputy Collector of Coimbatore, to the Sub-Collector of Coimbatore, dated Bhavâni, 7th March 1892, No. M—Camp.

With reference to your endorsement, Ref. on No. 235-C.R. of 1892, dated 20th ultimo, I have the honour to inform you that I arrived in Bhavâni the next day after I saw you in Erode; and after a day's halt here, I visited the villages and the markets noted below up to the 6th instant.

Villages visited are—

1. (16) Kesarimangalam	of the Bhavâni Rev. Inspector's firka.	
2. (17) Kalpavi		
3. (21) Kurichi		
4. (56) Mailambadi		
5. (57) Varadanallur		
6. (60) Bhavâni		
7. (1) Cauveripuram	of the Nerinjipett firka.	
8. (3) Sengiripatti		
9. (4) Kulathur		
10. (5) Mulakkadu		
11. (6) Sampalli		
12. (7) Navupatti		
13. (8) Nerinepettai	of the Nerinjipett firka.	
14. (10) Ammapettai		
15. (12) Budapady		
16. (13) Sengampettai		
17. (18) Paruvachi	of the Andiyur firka.	
18. (23) Mukasipudur		
19. (24) Attavanaipudur		
20. (25) Puttulur		
21. (32) Ennamangalam		
22. (33) Sankarapalayam		
23. (34) Gettisamudram		
24. (35) Andiyur		

I am given to understand that these are the bad villages in the taluk. So I did them first and I did not think it necessary to inspect the other villages as I have been asked by the Collector to attend to loan applications in Karur and Dhárápuram taluks. Besides this, the Tahsildar tells me that you are to be here for jamabandi from the 10th instant. During my visit I inspected the garden crop on the ground under wells and the oil-seed plants on dry lands wherever they existed. I inspected also the irrigation wells and those used for drinking water whenever complaints were made to me of deficiency in supply. The number of wells I inspected would be in all about 140. The markets visited are (1) Mailambadi, (2) Puthapadi, (3) Sampalli, and (4) Cauveripuram; the 1st and the second being the most important of the shandies in the taluk.

2. So far as I have seen and heard, I think the parts of the taluk most affected are the villages lying between the Cauvery and the Pachamalai hills, and those lying between the Ammapet-Andiyur road and the same hill, and not covered by the valley between Pachamalai and Barur hills. There are also some villages within one or two miles to the south of the Ammapet-Andiyur road, which have suffered. All these villages are 19 in number as per list (enclosure 1); 12 of these are situated in Nerinjipett firka and 7 in Andiyur. The total occupied area of these villages is 34,395 acres at the time of settlement and 31,708 acres according to last jamabandi, or 54 and 50 square miles, respectively. The number of irrigation wells said to be in good condition in these villages is 818. I do not think that the extent covered by well irrigation would be more than one-twelfth of the occupied lands in these villages on an average. The condition of the garden crops which I saw on the ground is good on the whole. These are generally tobacco, chillies and ragi. They are in excellent condition in selected villages, such as Kurichi, Kulathur, Sampalli and Singeripatti where the wells contain water sufficient for daily watering. In other villages they are moderate and by no means bad. The recent showers about 1½ inches which fell on the 28th ultimo in Cauveripuram, Kolathur, Sampalli, Singaripett, Navapett and Ammapett have done much good to these crops and to the oil-seed plants, especially in Singaripatti. The insufficient supply of water in wells in the villages of Ammapett, Pattur and Ennamangalam in particular has tended to tell upon the luxuriance of the existing crops and operated as a bar to the usual extent being cultivated. I have spoken of the extent and the condition of these crops in order to show what demand of labour they are likely to meet.

3. The population of these 19 villages according to last census is 28,000 in all. Some of these will be engaged in garden lands. As regards the rest, they must have mostly depended upon the late dry crops, ragi and cholum, which are reported to have yielded 4 annas and less in these parts. Some of the ryots, notably those living in Navapett and Sampalli, find remunerative work in going to the hills and cutting bamboos and selling them to the customary dealers in villages. Others find work in carrying sundry articles to the shandies around their places on fixed days and selling one article and buying another at profit. With the exception of these, the rest must feel the absence of demand for labour. I estimate them between 3,000 and 4,000 including pariahs, chucklers and others dependent upon mere cooly work. To these it would be necessary to find labour for the next 4 or 5 months. No cases of unusual migration, except to and fro to the adjacent hills and except among the weaving classes of whom further on, have been reported.

4. There is one thing which I cannot very easily understand, *i.e.*, why if there is real demand for labour, the needy men do not betake themselves to such works as repairs and sinking of wells. The amount paid under the Land Improvement Act from the 1st December last up to date in the taluk is Rs. 13,765, and in all the 19 villages referred to Rs. 5,222-8-0. I have not come across with any ryot class working at any of the wells. The owners always engage professional men called oddars even where the work does not require any skill and consists merely of earth-work. This conduct bears a striking contrast with that of the ryots of the Salem district living on the other side of the river Cauvery, of whom I saw two or three batches engaged in well-sinking work in this taluk. When I asked the ryots and the labouring classes,

they say that the work is one to which they are not accustomed. This does not seem to me to be satisfactory. I take it as showing no pressing demand for labour at present. The well owners have no doubt scruples to employing pariahs for fear they should touch and thereby pollute the water. But there can be no possible objection to pariahs being employed till water level is reached. I wish to draw attention to the extent of loan granted during the last three months, *i.e.*, from 1st December last up to date. The payments made are—

	RS.
Under ordinary rules in 107 cases—	
First instalment	8,752½
Second do.	1,100
Under special well rules in 42 cases—	
First instalment	3,912½
Total ...	13,765

The portion relating to the affected villages is—

	RS.
Under ordinary rules 51 cases—	
First instalment	4,147½
Second do.	550
and under special well rules 7 cases—	
First instalment	525
Total ...	5,222½

The number sanctioned and pending payment of instalment are :—

	In the taluk.	In the affected villages.
	RS.	RS.
Ordinary rules, 83 cases	10,545	4,235
Special well rules, 33 cases	4,525	4,225
Total ...	15,070	8,460

If the Tahsildar will encamp in the parts said to have had poor crops and make prompt and personal inquiries without leaving much in the hands of village officers and Revenue Inspectors, I am sure that the ryots will freely take to loans under the special well rules to dig new wells in favorable localities. Such works must supply labour to those that require it. If, after this is done, it is found that there is still very pressing demand for labour, I would recommend the opening of relief works as noted in the succeeding paragraph.

5. The following works suggest themselves to me :—

(1) Repairing road from Ammapet to Kaveripuram;
(2) Repairing road from Ammapet to Andiyur;
(3) Forming a new road to connect the Buthapadi shandy with that of Mailambadi;
(4) Restoring a chain of four ruined tanks situated in the limits of Kolathur, Mulakkadu and Sampalli; and
(5) Restoring a ruined tank in the limits of Kaveripuram village and taking off two channels from it for wet irrigation.

As regards No. 1, repairs to the road from Nerinjipett to Kaveripuram, this was taken up in November last and partly done. I think it is necessary to put this road into some order. All that I would propose is (1) to remove prickly-pear wherever necessary to keep them from the road margin, (2) to dig side-channels, and (3) to fill in the ruts, if any, in the road with the earth removed from the side-channels. I think it is scarcely necessary to break metal as I do not think that the road need be metalled. This work will supply labour to the persons living on the Cauvery side. As regards No. 2 this was also taken up and stopped in November last. This road will meet the demand of persons living on either side of it. No. 3 is a new proposal to connect the two important markets in the taluk. There is at present an "itteri" or foot-path. This could be converted into a road. The probable distance is 4 miles. As regards No. 4, the restoration of the irrigation tanks which must have been fed by the hill-stream crossing the road about two furlongs from the village site of Sampalli, I beg to enclose copy of my memorandum (enclosure No. 2), from which it will be seen that the hill-stream could be turned to advantage if the four tanks referred to in the memorandum were restored. These works will be really remunerative. As regards No. 5 the same thing can be said. In my memorandum (enclosure No. 3) about this proposal I have referred to the restoration of the ruined tank in Kaveripuram and to the opening of two channels—one on the east and the other on the west. Even though the

western channel were not taken up on the ground of cost and on the ground that the soil of the land that could be irrigated by it being poor, I would recommend the restoration of the tank and the formation of the eastern channel as being easy of achievement. The restoration of the tanks, &c., is one of the works suggested by Mr. Todhunter to improve the condition of the taluk.

6. In regard to weavers, there are no very important centres. There are, however—

60 looms weaving male cloths in Ammapet,
10 do. do. female do. in do.
60 do. do. female do. in Andiyur,

so far as I have seen. I am informed there are weavers in the villages of Jambai. Kavunthampadi, Kurichi and Odathurai in the casba firka ranging from 20 to 200 families. Most of these and some of those living in Anthiyur have also lands from which they have secured crops Their condition cannot therefore be said to be very much affected. Not so is the case of Ammapet weavers. I made inquiries as to the kind of cloth they weave and as to costs, &c. (enclosure No. 4)—*vide* separate memorandum. Sammanjee is one kind of cloth. It is 6½ by 2½ cubits a cloth. The value of thread No. 40 used for four cloths is Rs. 1-11-7; the value of silk used for the same is Rs. 0-8-0; the value of rice for conjee and oil is 1 anna; the wages due to a female to help in manufacturing the cloth is 4 annas. Therefore the whole cost amounts to Rs. 2-8-7. These four cloths are now generally sold for Rs. 3-6-0; they therefore leave a saving of As. 13-5, which is the wages for one week during which these cloths can be made by an ordinary hand. Therefore the cooly for a day for an ordinary hand comes to 2 annas. There is another coarse cloth, Therunagesvaram. My calculation about this cloth and about the female cloth that is woven here gives but a cooly of 2 annas a day to a man working at his own loom. The manufacture of cloths thus leaves a very scanty margin for wages and nothing for gain. With such wages have owners to maintain a family consisting generally of two working and two non-working souls in these times when the prices are double of what they were last year. So owners of looms at which they employed coolies have turned out their coolies and left idle these looms which they cannot themselves do, hence the coolies who had no looms of their own are left to take care of themselves. Some of them, about seven or eight families, have gone to other places, I believe, temporarily, leaving only the weak and infirm behind in charge of their houses.

7. I understand that in November last, when relief works were going on near Ammapet, 14 females and 5 males resorted to the works. The Tahsildar tells me that the males could not have done any manual labour, but were probably employed as head coolies. This is probably a fact, but one man actually told me he was employed in removing prickly-pear from road-side. This state of things was a sure test of the existence of distress among weavers. Ordinarily their case would require special treatment, but unfortunately these classes are not congregated together in considerable numbers either in the same village or in a group of contiguous villages. If this latter fact were no objection, I would recommend that the weavers be afforded relief on the lines sanctioned for Salem. There is one thing in which the weavers here differ from those in Salem. One is able to manufacture coarse cloths used by the lower classes, and that alone, while the others (*i.e.*, Salem weavers) are able to weave cloths used by the higher classes also. I have called on the Tahsildar to get correct information as to the number of looms that were working six months ago and the number that is now actually working. I shall send it on as soon as it is received.

8. In regard to opening poor-houses, this is now too early. There is no unusual influx of beggars, and I do not notice any sign of emaciation in the people from distress.

9. In regard to the resources of the taluk, I had the trade going to the several markets in the taluk registered as far as possible for a market day. The extent of grains received, with information as to whether they were products of the taluk or outside it, is given in the accompanying form (enclosure No. 5). From this it will be seen that the food-grains brought to the market, with the exception of paddy, are in nearly all cases local products. In regard to the Buthapadi shandy I do not quite rely upon the figures given. The village officers, who evidently neglected my orders and failed to keep accounts seem to have drawn upon their imagination and furnished some information. This shandy will only be just as large as the one at Mylambadi. Taking one and the same figures for both the shandies, the quantity received during a day in all the eleven shandies as given in the list is found to be dry grains 19,999 and paddy 32,022, both of them put together being 52,021 Madras measures. Looking to the fact that the total population of the taluk according to the last census was 120,000 in round numbers and they are mostly agriculturists—and looking also to the fact that at the several markets I attended personally there was no lack of supply to meet the demand, I consider the markets are fairly well supplied. I consider also that the stock of food-grains in the taluk is enough to meet its demand. Only the owners do not freely open their stock for sale for fear that their future should be more gloomy. I should not omit to add that the markets in question are located in important and convenient centres, and therefore fairly represent the quantity brought for sale from all the parts of the taluk.

10. Speaking of fodder for cattle, I have no reason to fear that the supply is very deficient. Dry fodder is available everywhere, and though the outturn of crop is reported to be poor I have noticed a number of cholum straw heaps collected in field sheds and huts. I am sure that, if the outturn of crops had been half as good as the outturn of straw, there should be no need or relief operations in this taluk at all.

Read—the following letter from J. STURROCK, Esq., Collector of Coimbatore, to the Secretary to the Commissioner of Revenue Settlement and the Director of the Department of Land Records and Agriculture, dated 29th March 1892, Ref. on No. 707-Bd. :—

In my endorsement of yesterday's date I omitted to say anything about wages, or the source from which the expenditure on relief works in Bhavâni is to be met.

2. I propose to adhere to the rates of wages introduced shortly after the Commissioner's visit to the Coimbatore district in September last, and to ask the District Board at their next meeting to sanction an allotment from the reserve, the work in the meantime being carried on as emergent under the President's order.

3. I have also noticed that I did not forward to the Board the portion of Mr. Moberly's letter in which he speaks most seriously of the condition of the people. It occurs in connection with the weavers, regarding whom I am reporting separately after endeavouring to satisfy myself on a few points. He there says: "most of them are emaciated, they have a pinched look about their faces, and some of them are undoubtedly suffering from want of food."

4. It may be necessary to adopt special measures for the weavers, but the works sanctioned by the Board in yesterday's telegram are close to the weavers' quarters and will afford relief to the most pressing cases.

Resolution—dated 30th March 1892, No. 254.

Submitted for the orders of Government.

2. In the papers read above, the Collector of Coimbatore states that in the Nerinjepett firka of the Bhavâni taluk, and in six villages of the Andiyur firka of the same taluk, the failure of crop has been so extensive that there is a number of persons with no stocks of grain, no money to buy grain, and no means of obtaining it, and that it is therefore necessary to open relief works in that portion of the taluk. The Commissioner has already, in Board's Proceedings, dated 25th September 1891, No. 612, sanctioned the opening of the—

Andiyur-Ammapet
Ammapet-Kaveripuram } roads as relief works.

In the Andiyur firka it is doubtful whether any relief works are really at present necessary, but the Andiyur portion of the first work mentioned will serve as a test work for that portion of the taluk.

3. In the distressed area, the Collector estimates that it will be necessary to afford employment for an average of 1,500 persons for the next six months if the early showers and the south-west monsoon rains come in seasonable amount. This would necessitate an expenditure of about Rs. 27,000. The Collector shows that on the roads selected the unexpended balance of the estimates is Rs. 29,832, and the Commissioner recommends that the works selected may be approved as there appear to be no irrigation works available for relief purposes in the locality. The Commissioner, however, doubts whether it will be necessary to afford relief for so long a period as six months, and considers that for the present it will suffice to provide for employing an average of 2,000 persons for three months. The cost of this would be about Rs. 18,200.

4. It does not appear necessary to provide at present for any gratuitous relief, though later on it may become necessary to open children's kitchens for the children of those employed on the works.

5. The Collector's report regarding relief to be granted to weavers will be awaited.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
" Collector of Coimbatore.

ORDER—dated 13th April 1892, No. 364, Revenue.

Miscellaneous.

Recorded.

2. The road works selected for relief purposes and referred to in paragraph 3 of the Board's Proceedings are approved. No allotment of funds is necessary with reference to G.O., dated 7th April 1892, No. 1880.

3. The report referred to in paragraph 5 should be submitted to Government when received.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture.
Copy to the Local and Municipal Department.
" " Public Works Department.

Exd. C. M. Brisson.

80 Copies.

Gobt. of {1892} Madras.

REVENUE.

Issued

Recd. Encl.

G.O., 13th April 1892, No. 364.

APRIL.

Relief works.

Board's Proceedings submitting letter from the Collector of Coimbatore regarding — in the Bhavâni taluk, recorded with remark.

Order thereon 1325 W
d/27/4/92
Communicated to
the Supdg. Engineer IV
Circle.
157 ovB
DW

2 S.E. IV circle

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 30th March 1892, No. 254 :—

MR. C[illegible]STOUN.

Read—the following letter from H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated Ammápet, 21st March 1892, Ref. on No. 788-R.G. :—

As requested in your Reference on No. 476-Bd., dated 2nd instant, I have the honour to submit my report on the Bhaváni taluk.

2. *Markets.*—There are 11 markets. From Deputy Collector Mr. Narayanasami Aiyer's inquiries they appear to be well supplied with food-grains. The markets supply the inhabitants of the taluk with all the food-grain they require.

3. *Roads.*—The greater portion of the taluk is well served with roads. The road from Nerinjipet to Samballi is reported to be in bad order, and that from Samballi to Kaveripuram to be almost impassable even for country carts. The markets at Samballi and Kaveripuram appear, however, to be supplied chiefly from the Salem district.

People in these sparsely populated localities seem to depend more on local stocks than markets for grain, and these are not yet exhausted. Ragi comes from Kollegál also.
(Intld.) J. S.

4. *Number of persons requiring relief.*—The Tahsildar's estimate is as follows :—

Pariahs	480
Chucklers	200
Padiyachis	600
Vetuvars	250
Weavers	100
Tottiyars	50
Others	420
Total ...	2,100

The Deputy Collector thinks that between 3,000 and 4,000 persons may require relief, if the season does not improve.

With the exception of the weavers, regarding whom I shall submit a separate report, I have seen no signs of actual distress at present; but as prices are very high, and the purely dry crops have almost entirely failed in the villages near the Palamalai Hills, it is almost certain that the labouring classes feel the want of labour. I would suggest, therefore, that two or three relief works be opened as a test measure. If this be done, the attendance at the works will show whether further relief is required.

5. *Relief works.*—Out of the list of available Local Fund works, which you sent, the Tahsildar has selected six, viz. :—

(1) Road from Audiyur to Ammápet.
(2) Do. do. to Attani.
(3) Do. Mailambadi to Olagadam.
(4) Do. do. to Tirupúr.
(5) Do. Nerinjipet to Kaveripuram.
(6) Do. Audiyur to Chellampalaiyam.

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(6) Do. Audiyur to Chellampalaiyam.

The selection is a good one, and will supply work for all who are likely to require relief. For the present, however, it is only necessary to start work on Nos. 1 and 5, Andiyur to Ammapet and Nerinjipet to Kaveripuram.

Work may consist of—

(1) Clearing road margins of prickly-pear and defining the road limits.
(2) Digging side channels.
(3) Collection, breaking and stacking of metal.

I would further suggest that good wells be constructed at suitable intervals along the roads. They will supply water for the coolies and for the road work, and will be useful afterwards for travellers. The road from Nerinjipet to Kaveripuram runs for the first 15 miles as far as Samballi, within a short distance of the Cauvery; this portion of the road may therefore be metalled.

6. The Tahsildar suggests that the repair of tanks may be undertaken as relief works. He does not, however, say what tanks should be repaired, and has no estimates ready. Tanks are not so useful as wells for contending against famine. Unless therefore the Executive Engineer can recommend any tanks for repair, I do not think any money should be spent on tanks.

7. *Advances to landed classes.*—Beyond loans under the Land Improvement Loans Act and the Agriculturists' Loans Act no advances are at present required. For loans under the former Act, Rs. 10,000 and for loans under the second Act Rs. 3,000 may for the present be allotted. Many owners of garden lands want loans for the purchase of working cattle, and it is advisable, I think, that they should be allowed to borrow the necessary funds from Government.

8. I enclose Bhaváni Tahsildar's report No. 548-Gl. Series of 11th March 1892, with the remark that the figures in paragraph 3 (*a*) are *not* the normal prices, but the lowest prices obtainable during the past six months.

9. *Gratuitous relief.*—The Tahsildar, you will see, says that no such relief is required at present. You have recently sanctioned such relief to a poor family at Andiyur. Of course in every village there are two or three persons who are unable to work and find a difficulty in living. I have instructed the Tahsildar to send without delay a list, in the form given in section 56 of the Famine Code, of all persons entitled to gratuitous relief; and if, after further inquiry, I find there are persons entitled to such relief, I will submit the necessary proposals.

Endorsement by J. STURROCK, Esq., Collector of Coimbatore, dated 27th March 1892, Ref. on No. 557-Sub.

Forwarded with reference to paragraph 3 of Board's Proceedings, dated 22nd February 1892, No. 135. I also enclose an extract from a later letter from Mr. Moberly and send in original with its enclosure his letter, dated 26th March 1892, forwarding Deputy Collector M.R.Ry. Narayanasami Iyer's report on the taluk. I shall address the Board separately regarding the weavers.

2. The tract now affected is almost the same as that reported on in my letter recorded with Board's Proceedings, dated 25th September 1891, No. 612, when I obtained permission to start relief works pending the harvesting of the north-east monsoon crops. When I closed those works on the 15th January last, I reported that the crops were so bad that it would be necessary to re-open the works as soon as the private work in connection with the harvest—such as it was—came to an end, and I have reported the same in my monthly season reports for January and February. During all this time the Tahsildar has been reporting, week by week, that there was no work available for labourers, as the harvest work was being done by the ryots themselves. I knew, however, that there was a great demand for labour for the abundant wet crop in the adjoining taluk of Satyamangalam, and as the condition of the people was said to be still good, the time for re-opening the works did not seem to have arrived until I saw Mr. Moberly yesterday. In his letter of the 21st instant, forwarded with this endorsement, he speaks only of opening works as a test measure, but in his letter of the 25th, of which I send an extract, he states that his personal inquiries

have convinced him that it is very necessary that relief works should be opened at once, and on talking over matters yesterday I decided, in consideration of the time which must necessarily elapse in arranging preliminaries, to ask by telegram for permission to open the works specified in paragraph 10 of my letter, recorded with Board's Proceedings, dated 22nd February 1892, No. 135.

3. With regard to the state of the Nerinjipet firka, which was treated as distressed at the close of last year, although even there a few villages were, and are, in fairly prosperous state, I need add nothing to what is said in my former letter * beyond noting the outturn this year as compared with the admittedly bad outturn of the previous year:—

* Board's Proceedings, dated 25th September 1891, No. 612.

	1890–91.	1891–92.
20 annas	146	...
16 do.	2,014	287
8 do.	18,385	5,085
4 do. (withered)	15,897	18,482 9,225
Total ...	36,472	33,079

Now that such work, as has been afforded by the local harvest and by that in Satyamangalam is over, it is obvious that relief works must be more necessary now than before.

4. In addition to the Nerinjipet firka the Tahsildar would now class, as distressed, 14 villages of the Bhaváni firka and 12 villages of the Andiyur firka. Deputy Collector M.R.Ry. Narayanasami Iyer, however, includes only seven villages of the Andiyur firka in his list of distressed villages, and the Sub-Collector accepts his view generally. Mr. Moberly had not time before his transfer to inspect the worst portion of the Bhaváni firka, but from what I saw of the state of the crops in November last, and having regard to the outturn statement for four years, it is clear that these villages are much better off than those of the Nerinjipet firka, and relief measures there are not as yet called for.

5. The following figures show the outturn for four years in the six villages of the Andiyur firka which Mr. Moberly considers the most distressed:—

—	1888–89.	1889–90.	1890–91.	1891–92.
	23	4	..	..
20 annas	2,927	7,358	4,531	179
16 do.	4,961	1,462	4,215	1,895
8 do.	509	..	374	3,853
4 do.	23	..	17	2,067
Withered				
Total ..	8,443	8,824	9,137	7,994

These figures disclose for the current year a considerable falling off in cultivation and a very large area of crop which either withered or gave a poor outturn, but the outturn last year was decidedly good, and very much better the year before, and as all reports go to show that though people are asking for work, there are no signs of emaciation and the markets are mainly supplied from local sources. I cannot admit that there is as yet any necessity for starting relief works in the Andiyur firka. As however one of the works which I propose to start for the Nerinjipet firka extends to Andiyur, it will serve as a test work for that firka.

6. The Tahsildar, who considers that the distress affects a population of over 50,000, estimates the number likely to require relief at 2,100. The Deputy Collector, out of a much smaller population, puts the number at from 3,000 to 4,000. Though I regard as distressed only a portion of the Nerinjipet firka with a population under 20,000, it is to be borne in mind that there are some people badly off in many other

villages within a reasonable distance of the works, and I can form no estimate of the possible influx from the Salem district on the other side of the river along which the most important of the works will run. Last year when the works were the same as I now propose to open, the highest figure was 1,521 immediately after the work was opened. As tasking was got into proper order, the numbers fell rapidly and never afterwards rose beyond 675. If the kar and south-west monsoon rains come in due course, and we have at present no reason to assume that they will not, I do not see that we need anticipate having to provide work for an average of more than 1,500 until the south-west monsoon crops are ready for reaping about six months hence. Unless there is a further failure of rain, prices * are not likely to rise much, and Rs. 150 a day, or Rs. 27,000 for six months, will probably meet all requirements. The unexpended portions of the estimates of the two selected works are as follows:—

* 26th March—

Rice	9·95
Cholum	12.18
Ragi	13·94
Cumbu	15·90

	Rs.
Ammapet-Cauveripuram road	23,763
Ammapet-Andiyur road	6,069
Total ...	29,832

so that no more works are likely to be required. There are no irrigation works available. One of the schemes mentioned by the Deputy Collector is shown by Mr. Moberly to be impracticable, and the Cauveripuram one is unsuitable as it is situated in the most remote and sparsely populated corner of the affected tract.

7. I do not think it necessary to add much more to what the Sub-Collector has said. Gratuitous relief is obviously not required as yet. The case referred to by the Sub-Collector is one which ordinarily would have been left to private charity, but at present it seemed dangerous to rely on that resource, and as a family suddenly left destitute by the death of the bread winner in Andiyur—outside the distressed tract—was in danger of starvation, I authorized the taluk magistrate to advance what was necessary for bare subsistence and debit the charge to magisterial contingencies. There is no danger any where of failure of supplies. The distress is due merely to a number of people having no stocks of their own, no money with which to buy grain, and no means of obtaining it. To relieve this, all that is necessary is to start relief works, and if this is done soon, we will have good work in return for what we spend. Dry fodder is still available for cattle and loans for wells are being freely given. A special report about the condition of the weavers will be submitted shortly.

ENCLOSURE No. 1.

From H. MOBERLY, Esq., Acting Sub-Collector, Coimbatore, to the Collector of Coimbatore, dated 25th March 1892, Ref. No. 151, Mis.

In your reference on No. 227-Sub. of 1892, you called for a report on the labouring classes in Bhavâni taluk. I have consulted the Police Inspector, the Tahsildar, Deputy Collector Mr. Narayanasamier, who has sent a very interesting report based on personal inquiries and I have just returned from a tour as far as Sampalli, having visited as many villages as possible and made all possible inquiries.

2. The Police Inspector reports that only people residing within the limits of the Bhavâni, Andiyur and Athani Police stations went to Satyamangalam for the paddy harvest; that the labouring classes in the Nerinjipet firka were not able to go to Satyamangalam on account of the distance, and that they are suffering from want of labour. He further reports that, with the exception of a few villages in the limits of Bhavâni and Andiyur Police stations, the crops were so poor that the ryots could not afford to employ coolies to cut, carry and thresh the crops.

3. The Tahsildar's report is to the same effect. He states that the labouring classes say that the relief works which were opened last year afforded relief, but that since they were closed they have suffered much.

4. My personal inquiries convinced me that it is very necessary that relief works should be opened at once. With the exception of the weavers, the labouring classes look fairly well nourished; but one cannot rely on appearances. Many of the labouring classes have been

obliged to pawn or sell not only their jewels but even their brass domestic utensils in order to buy grain for food, and this shows that relief is required. At present, we have no walking skeletons stalking about; but we should not wait till the people are reduced to that condition. If we wait till then, they will not be able to give a proper outturn of work, whereas at present they can work and are willing to work. I therefore beg most earnestly to impress upon you the necessity of opening relief-works at once. Work on the road from Nerinjipett to Cauveripuram, and from Ammapet to Andiyur will afford relief to the people in the worst affected tracts. I would also suggest that ordinary work be started on the road from Andiyur to Athani and from Andiyur to Sellampalaiyam, so as to afford relief to the poorer classes in the west part of the taluk.

* * * * *

ENCLOSURE No. 2.

From H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated 26th March 1892, Ref. No. 788 R.G.

In continuation of my letter, Reference No. 788 R.G., dated 21st March 1892, regarding the condition of the labouring classes in Bhavâni taluk, I have the honour to forward, in original, Deputy Collector Mr. Narayanasami Iyer's report No. M—Camp of 11th instant. I am much indebted to that gentleman for his careful inquiries and his painstaking report.

2. A few remarks on portions of his report are necessary.

Para. 2.—The ryots did not appreciate the rains which fell on 28th February. They deemed it unseasonable as it would bring up the whiteants and they would destroy what little grass there was. The whiteants have come up and destroyed much of the grass.

Para. 3.—It is necessary, I think, to provide relief for five months certainly. Even if we have showers in April and May and a good south-west monsoon most of the labouring classes will want work. The preparing of the ground and the sowing will not take many days, and the labouring classes will have no work, while the crops are growing. Very few have any stock of grain, and those who have no stock will not in the absence of relief works, have the wherewithal to buy food.

Para. 4.—In this district more than in any district I know, the people are so wedded to their caste and other prejudices, that theywould do anything—even die—rather than undertake work which their caste prejudices are opposed to. We must take them as we find them and give them work which they have no objection to undertake. The figures given by the Deputy Collector show that the Tahsildar has been giving his special attention to loan applications, and from what I have seen of his work lately, I am certain he is doing his best to dispose of applications as quickly as possible.

Para. 5.— I have recommended work on the roads from Ammapet to Kaveripuram and Ammapet to Andiyur.

3. A road from Buthapadi market to Mailambadi is not necessary as the Local Fund Engineer has proposed a road from Mailambadi to Theruppur, which will cross the Ammapet-Andiyur road.

4. The proposal to repair four tanks in Mulakkadu, Sampalli and Kolathur is condemned by the ryots and need not be investigated. See my remarks on enclosure 2 to Deputy Collector's letter.

5. The scheme to restore a ruined tank in Kaveripuram, I have not been able to look into. It does not seem very hopeful. Besides wells are better than tanks for contending against famine.

Para. 6.—The "Sammanjee" cloth of the Deputy Collector should be Saunanji (narrow border). The cloth he mentions is an extraordinarily large one and so more expensive than the one I have proposed. The "Thirunagesvaram" cloth I found on inquiry to be too elaborate for our purposes, so I left it out of consideration.

Para. 10. *Fodder.*—I agree with the Deputy Collector. There are stacks of dry fodder all over the place, so at present there is no scarcity of dry fodder.

ENCLOSURE No. 3.

From M R.Ry T. V. NARAYANASAWMY AIYAR Avergal, Deputy Collector of Coimbatore, to the Sub-Collector of Coimbatore, dated Bhavâni, 7th March 1892, No. M—Camp.

With reference to your endorsement, Ref. on No. 235-C.R. of 1892, dated 20th ultimo, I have the honour to inform you that I arrived in Bhavâni the next day after I saw you in Erode; and after a day's halt here, I visited the villages and the markets noted below up to the 6th instant.

Villages visited are—

1. (16) Kesarimangalam	of the Bhavani Rev. Inspector's firka.	
2. (17) Kalpavi		
3. (21) Kurichi		
4. (56) Mailambadi		
5. (57) Varadanallur		
6. (60) Bhavani		
7. (1) Cauveripuram	of the Nerinjipett firka.	
8. (3) Sengiripatti		
9. (4) Kulathur		
10. (5) Mulakkadu		
11. (6) Sampalli		
12. (7) Navupatti		
13. (8) Nerinepettai	of the Nerinjipett firka.	
14. (10) Ammapettai		
15. (12) Budapady		
16. (13) Sengampettai		
17. (18) Paruvachi	of the Andiyur firka.	
18. (23) Mukasipudur		
19. (24) Attavanaipudur		
20. (25) Puttulur		
21. (32) Ennamangalam		
22. (33) Sankarapalayam		
23. (34) Gettisamudram		
24. (35) Andiyur		

I am given to understand that these are the bad villages in the taluk. So I did them first and I did not think it necessary to inspect the other villages as I have been asked by the Collector to attend to loan applications in Karur and Dharapuram taluks. Besides this, the Tahsildar tells me that you are to be here for jamabandi from the 10th instant. During my visit I inspected the garden crop on the ground under wells and the oil-seed plants on dry lands wherever they existed. I inspected also the irrigation wells and those used for drinking water whenever complaints were made to me of deficiency in supply. The number of wells I inspected would be in all about 140. The markets visited are (1) Mailambadi, (2) Puthapatty, (3) Sampalli, and (4) Cauveripuram; the 1st and the second being the most important of the shandies in the taluk.

2. So far as I have seen and heard, I think the parts of the taluk most affected are the villages lying between the Cauvery and the Pachamalai hills, and those lying between the Ammapet-Andiyur road and the same hill, and not covered by the valley between Pachamalai and Barur hills. There are also some villages within one or two miles to the south of the Ammapet-Andiyur road, which have suffered. All these villages are 19 in number as per list (enclosure 1); 12 of these are situated in Nerinjipett firka and 7 in Andiyur. The total occupied area of these villages is 34,395 acres at the time of settlement and 31,708 acres according to last jamabandi, or 54 and 50 square miles, respectively. The number of irrigation wells said to be in good condition in these villages is 818. I do not think that the extent covered by well irrigation would be more than one-twelfth of the occupied lands in these villages on an average. The condition of the garden crops which I saw on the ground is good on the whole. These are generally tobacco, chillies and ragi. They are in excellent condition in selected villages, such as Kurichi, Kulathur, Sampalli and Singeripatti where the wells contain water sufficient for daily watering. In other villages they are moderate and by no means bad. The recent showers about 1½ inches which fell on the 28th ultimo in Cauveripuram, Kolathur, Sampalli, Singaripett, Navapett and Ammapett have done much good to these crops and to the oil-seed plants, especially in Singaripatti. The insufficient supply of water in wells in the villages of Ammapett, Pattur and Ennamangalam in particular has tended to tell upon the luxuriance of the existing crops and operated as a bar to the usual extent being cultivated. I have spoken of the extent and the condition of these crops in order to show what demand of labour they are likely to meet.

3. The population of these 19 villages according to last census is 28,000 in all. Some of these will be engaged in garden lands. As regards the rest, they must have mostly depended upon the late dry crops, ragi and cholum, which are reported to have yielded 4 annas and less in these parts. Some of the ryots, notably those living in Navapett and Sampalli, find remunerative work in going to the hills and cutting bamboos and selling them to the customary dealers in villages. Others find work in carrying sundry articles to the shandies around their places on fixed days and selling one article and buying another at profit. With the exception of these, the rest must feel the absence of demand for labour. I estimate them between 3,000 and 4,000 including pariahs, chucklers and others dependent upon mere cooly work. To these it would be necessary to find labour for the next 4 or 5 months. No cases of unusual migration, except to and fro to the adjacent hills and except among the weaving classes of whom further on, have been reported.

4. There is one thing which I cannot very easily understand, *i.e.*, why if there is real demand for labour, the needy men do not betake themselves to such works as repairs and sinking of wells. The amount paid under the Land Improvement Act from the 1st December last up to date in the taluk is Rs. 13,765, and in all the 19 villages referred to Rs. 5,222-8-0. I have not come across with any ryot class working at any of the wells. The owners always engage professional men called oddars even where the work does not require any skill and consists merely of earth-work. This conduct bears a striking contrast with that of the ryots of the Salem district living on the other side of the river Cauvery, of whom I saw two or three batches engaged in well-sinking work in this taluk. When I asked the ryots and the labouring classes,

they say that the work is one to which they are not accustomed. This does not seem to me to be satisfactory. I take it as showing no pressing demand for labour at present. The well owners have no doubt scruples to employing pariahs for fear they should touch and thereby pollute the water. But there can be no possible objection to pariahs being employed till water level is reached. I wish to draw attention to the extent of loan granted during the last three months, *i.e.*, from 1st December last up to date. The payments made are—

	RS.
Under ordinary rules in 107 cases—	
First instalment	8,752½
Second do.	1,100
Under special well rules in 42 cases—	
First instalment	3,912½
Total ...	13,765

The portion relating to the affected villages is—

	RS.
Under ordinary rules 51 cases—	
First instalment	4,147½
Second do.	550
and under special well rules 7 cases—	
First instalment	525
Total ...	5,222½

The number sanctioned and pending payment of instalment are :—

	In the taluk.	In the affected villages.
	RS.	RS.
Ordinary rules, 83 cases	10,545	4,235
Special well rules, 33 cases	4,525	4,225
Total ...	15,070	8,460

If the Tahsildar will encamp in the parts said to have had poor crops and make prompt and personal inquiries without leaving much in the hands of village officers and Revenue Inspectors, I am sure that the ryots will freely take to loans under the special well rules to dig new wells in favorable localities. Such works must supply labour to those that require it. If, after this is done, it is found that there is still very pressing demand for labour, I would recommend the opening of relief works as noted in the succeeding paragraph.

5. The following works suggest themselves to me :—

(1) Repairing road from Ammapet to Kaveripuram;
(2) Repairing road from Ammapet to Andiyur;
(3) Forming a new road to connect the Buthapadi shandy with that of Mailambadi;
(4) Restoring a chain of four ruined tanks situated in the limits of Kolathur, Mulakkadu and Sampalli; and
(5) Restoring a ruined tank in the limits of Kaveripuram village and taking off two channels from it for wet irrigation.

As regards No. 1, repairs to the road from Nerinjipett to Kaveripuram, this was taken up in November last and partly done. I think it is necessary to put this road into some order. All that I would propose is (1) to remove prickly-pear wherever necessary to keep them from the road margin, (2) to dig side-channels, and (3) to fill in the ruts, if any, in the road with the earth removed from the side-channels. I think it is scarcely necessary to break metal as I do not think that the road need be metalled. This work will supply labour to the persons living on the Cauvery side. As regards No. 2 this was also taken up and stopped in November last. This road will meet the demand of persons living on either side of it. No. 3 is a new proposal to connect the two important markets in the taluk. There is at present an "itteri" or foot-path. This could be converted into a road. The probable distance is 4 miles. As regards No. 4, the restoration of the irrigation tanks which must have been fed by the hill-stream crossing the road about two furlongs from the village site of Sampalli, I beg to enclose copy of my memorandum (enclosure No. 2), from which it will be seen that the hill-stream could be turned to advantage if the four tanks referred to in the memorandum were restored. These works will be really remunerative. As regards No. 5 the same thing can be said. In my memorandum (enclosure No. 3) about this proposal I have referred to the restoration of the ruined tank in Kaveripuram and to the opening of two channels—one on the east and the other on the west. Even though the

4. It does not appear necessary to provide at present for any gratuitous relief, though later on it may become necessary to open children's kitchens for the children of those employed on the works.

5. The Collector's report regarding relief to be granted to weavers will be awaited.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
" Collector of Coimbatore.

ORDER—dated 13th April 1892, No. 364, Revenue.

Miscellaneous.

Recorded.

2. The road works selected for relief purposes and referred to in paragraph 3 of the Board's Proceedings are approved. No allotment of funds is necessary with reference to G.O., dated 7th April 1892, No. 1880.

3. The report referred to in paragraph 5 should be submitted to Government when received.

(True Extract.)

Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture.
Copy to the Local and Municipal Department.
" " Public Works Department.

Exd. C. M. Brisson.

80 Copies.

P. W. CURRENT No. 4410

Govt. of {1892} Madras.

REVENUE.

Issued 20.5.92

Recd. 26.4.92 Encl.

G.O., 13th April 1892, No. 364.

APRIL.

Relief works.

Board's Proceedings submitting letter from the Collector of Coimbatore regarding — in the Bhavâni taluk, recorded with remark.

5/1

No. 1325 W dt/ Apl, 27, 1892

Communicated to the S.E. IV Circle

B. X.

Communicated to the S.E. IV Circle

O.B. 26/4/92

S. 26/4

S.E. IV Circle 27/4.

26/4 to 6 vols

28/4.

J.C. 28/4

with order.

13TH APRIL 1892, No. 364, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 30th March 1892, No. 254 :—

MR. CLOGSTOUN.

Read—the following letter from H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated Ammápet, 21st March 1892, Ref. on No. 788-R.G. :—

As requested in your Reference on No. 476-Bd., dated 2nd instant, I have the honour to submit my report on the Bhaváni taluk.

2. *Markets.*—There are 11 markets. From Deputy Collector Mr. Narayanasami Aiyer's inquiries they appear to be well supplied with food-grains. The markets supply the inhabitants of the taluk with all the food-grain they require.

3. *Roads.*—The greater portion of the taluk is well served with roads. The road from Nerinjipet to Samballi is reported to be in bad order, and that from Samballi to Kaveripuram to be almost impassable even for country carts. The markets at Samballi and Kaveripuram appear, however, to be supplied chiefly from the Salem district.

People in these sparsely populated localities seem to depend more on local stocks than markets for grain, and these are not yet exhausted. Ragi comes from Kollegál also.
(Intld.) J. S.

4. *Number of persons requiring relief.*—The Tahsildar's estimate is as follows :—

Pariahs	480
Chucklers	200
Padiyachis	600
Vetuvars	250
Weavers	100
Tottiyars	50
Others	420
Total ...	2,100

The Deputy Collector thinks that between 3,000 and 4,000 persons may require relief, if the season does not improve.

With the exception of the weavers, regarding whom I shall submit a separate report, I have seen no signs of actual distress at present; but as prices are very high, and the purely dry crops have almost entirely failed in the villages near the Palamalai Hills, it is almost certain that the labouring classes feel the want of labour. I would suggest, therefore, that two or three relief works be opened as a test measure. If this be done, the attendance at the works will show whether further relief is required.

5. *Relief works.*—Out of the list of available Local Fund works, which you sent, the Tahsildar has selected six, viz. :—

(1) Road from Audiyur to Ammápet.
(2) Do. do. to Attani.
(3) Do. Mail[illegible]badi to Olagadam.
(4) Do. [illegible] to Tirupúr.
(5) Do. Neri[illegible]ipet to Kaveripuram.
(6) Do. Audi[illegible]yur to Chellampalaiyam.

P. R. CURRENT No. 4410

Govt. of {1892} Madras.

REVENUE.

Issued 20.5.92

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G.O., 13th April 1892, No. 364.

APRIL.

Relief works.

Board's Proceedings submitting letter from the Collector of Coimbatore regarding — in the Bhavâni taluk, recorded with remark.

5/1

No. 1325 W a/c Apl. 27, 1892

Famine

B. X.

Communicated to the S.E. III Circle
Communicated to the S.E. IV Circle

O.B. 26.4.92

S.E. III Circle 27/4.
S.E. IV Circle
2 C.pies to each
for information.
28/4.

J.C. 28/4

with the order.

13TH APRIL 1892, No. 364, REVENUE.

GOVERNMENT OF MADRAS.

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With the exception of the weavers, regarding whom I shall submit a separate report, I have seen no signs of actual distress at present; but as prices are very high, and the purely dry crops have almost entirely failed in the villages near the Palamalai Hills, it is almost certain that the labouring classes feel the want of labour. I would suggest, therefore, that two or three relief works be opened as a test measure. If this be done, the attendance at the works will show whether further relief is required.

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(4) Do. [illegible] to Tirupúr.
(5) Do. Neri[illegible]ipet to Kaveripuram.
(6) Do. Audi[illegible]ur to Chellampalaiyam.

The selection is a good one, and will supply work for all who are likely to require relief. For the present, however, it is only necessary to start work on Nos. 1 and 5, Andiyur to Ammapet and Nerinjipet to Kaveripuram.

Work may consist of—

(1) Clearing road margins of prickly-pear and defining the road limits.
(2) Digging side channels.
(3) Collection, breaking and stacking of metal.

I would further suggest that good wells be constructed at suitable intervals along the roads. They will supply water for the coolies and for the road work, and will be useful afterwards for travellers. The road from Nerinjipet to Kaveripuram runs for the first 15 miles as far as Samballi, within a short distance of the Cauvery; this portion of the road may therefore be metalled.

6. The Tahsildar suggests that the repair of tanks may be undertaken as relief works. He does not, however, say what tanks should be repaired, and has no estimates ready. Tanks are not so useful as wells for contending against famine. Unless therefore the Executive Engineer can recommend any tanks for repair, I do not think any money should be spent on tanks.

7. *Advances to landed classes.*—Beyond loans under the Land Improvement Loans Act and the Agriculturists' Loans Act no advances are at present required. For loans under the former Act, Rs. 10,000 and for loans under the second Act Rs. 3,000 may for the present be allotted. Many owners of garden lands want loans for the purchase of working cattle, and it is advisable, I think, that they should be allowed to borrow the necessary funds from Government.

8. I enclose Bhavâni Tahsildar's report No. 548-Gl. Series of 11th March 1892, with the remark that the figures in paragraph 3 (*a*) are *not* the normal prices, but the lowest prices obtainable during the past six months.

9. *Gratuitous relief.*—The Tahsildar, you will see, says that no such relief is required at present. You have recently sanctioned such relief to a poor family at Andiyur. Of course in every village there are two or three persons who are unable to work and find a difficulty in living. I have instructed the Tahsildar to send without delay a list, in the form given in section 56 of the Famine Code, of all persons entitled to gratuitous relief; and if, after further inquiry, I find there are persons entitled to such relief, I will submit the necessary proposals.

Endorsement by J. STURROCK, Esq., Collector of Coimbatore, dated 27th March 1892, Ref. on No. 557-Sub.

Forwarded with reference to paragraph 3 of Board's Proceedings, dated 22nd February 1892, No. 135. I also enclose an extract from a later letter from Mr. Moberly and send in original with its enclosure his letter, dated 26th March 1892, forwarding Deputy Collector M.R.Ry. Narayanasami Iyer's report on the taluk. I shall address the Board separately regarding the weavers.

2. The tract now affected is almost the same as that reported on in my letter recorded with Board's Proceedings, dated 25th September 1891, No. 612, when I obtained permission to start relief works pending the harvesting of the north-east monsoon crops. When I closed those works on the 15th January last, I reported that the crops were so bad that it would be necessary to re-open the works as soon as the private work in connection with the harvest—such as it was—came to an end, and I have reported the same in my monthly season reports for January and February. During all this time the Tahsildar has been reporting, week by week, that there was no work available for labourers, as the harvest work was being done by the ryots themselves. I knew, however, that there was a great demand for labour for the abundant wet crop in the adjoining taluk of Satyamangalam, and as the condition of the people was said to be still good, the time for re-opening the works did not seem to have arrived until I saw Mr. Moberly yesterday. In his letter of the 21st instant, forwarded with this endorsement, he speaks only of opening works as a test measure, but in his letter of the 25th, of which I send an extract, he states that his personal inquiries

have convinced him that it is very necessary that relief works should be opened at once, and on talking over matters yesterday I decided, in consideration of the time which must necessarily elapse in arranging preliminaries, to ask by telegram for permission to open the works specified in paragraph 10 of my letter, recorded with Board's Proceedings, dated 22nd February 1892, No. 135.

3. With regard to the state of the Nerinjipet firka, which was treated as distressed at the close of last year, although even there a few villages were, and are, in fairly prosperous state, I need add nothing to what is said in my former letter * beyond noting the outturn this year as compared with the admittedly bad outturn of the previous year:—

* Board's Proceedings, dated 25th September 1891, No. 612.

	1890–91.	1891–92.
20 annas	146	...
16 do.	2,014	287
8 do.	18,385	5,085
4 do. (withered)	15,897	{ 18,482 / 9,225
Total ...	36,472	33,079

Now that such work, as has been afforded by the local harvest and by that in Satyamangalam is over, it is obvious that relief works must be more necessary now than before.

4. In addition to the Nerinjipet firka the Tahsildar would now class, as distressed, 14 villages of the Bhavâni firka and 12 villages of the Andiyur firka. Deputy Collector M.R.Ry. Narayanasami Iyer, however, includes only seven villages of the Andiyur firka in his list of distressed villages, and the Sub-Collector accepts his view generally. Mr. Moberly had not time before his transfer to inspect the worst portion of the Bhavâni firka, but from what I saw of the state of the crops in November last, and having regard to the outturn statement for four years, it is clear that these villages are much better off than those of the Nerinjipet firka, and relief measures there are not as yet called for.

5. The following figures show the outturn for four years in the six villages of the Andiyur firka which Mr. Moberly considers the most distressed:—

—	1888–89.	1889–90.	1890–91.	1891–92.
	23	4	..	..
20 annas	2,927	7,358	4,531	179
16 do.	4,961	1,462	4,215	1,895
8 do.	509	..	374	3,853
4 do.	23	..	17	2,067
Withered	8,443	8,824	9,137	7,994
Total ..				

These figures disclose for the current year a considerable falling off in cultivation and a very large area of crop which either withered or gave a poor outturn, but the outturn last year was decidedly good, and very much better the year before, and as all reports go to show that though people are asking for work, there are no signs of emaciation and the markets are mainly supplied from local sources. I cannot admit that there is as yet any necessity for starting relief works in the Andiyur firka. As however one of the works which I propose to start for the Nerinjipet firka extends to Andiyur, it will serve as a test work for that firka.

6. The Tahsildar, who considers that the distress affects a population of over 50,000, estimates the number likely to require relief at 2,100. The Deputy Collector, out of a much smaller population, puts the number at from 3,000 to 4,000. Though I regard as distressed only a portion of the Nerinjipet firka with a population under 20,000, it is to be borne in mind that there are some people badly off in many other

villages within a reasonable distance of the works, and I can form no estimate of the possible influx from the Salem district on the other side of the river along which the most important of the works will run. Last year when the works were the same as I now propose to open, the highest figure was 1,521 immediately after the work was opened. As tasking was got into proper order, the numbers fell rapidly and never afterwards rose beyond 675. If the kar and south-west monsoon rains come in due course, and we have at present no reason to assume that they will not, I do not see that we need anticipate having to provide work for an average of more than 1,500 until the south-west monsoon crops are ready for reaping about six months hence. Unless there is a further failure of rain, prices * are not likely to rise much, and Rs. 150 a day, or Rs. 27,000 for six months, will probably meet all requirements. The unexpended portions of the estimates of the two selected works are as follows:—

* 26th March—

Rice	9·95
Cholum	12.18
Ragi	13·94
Cumbu	15·90

	Rs.
Ammapet-Cauveripuram road	23,763
Ammapet-Andiyur road	6,069
Total ...	29,832

so that no more works are likely to be required. There are no irrigation works available. One of the schemes mentioned by the Deputy Collector is shown by Mr. Moberly to be impracticable, and the Cauveripuram one is unsuitable as it is situated in the most remote and sparsely populated corner of the affected tract.

7. I do not think it necessary to add much more to what the Sub-Collector has said. Gratuitous relief is obviously not required as yet. The case referred to by the Sub-Collector is one which ordinarily would have been left to private charity, but at present it seemed dangerous to rely on that resource, and as a family suddenly left destitute by the death of the bread winner in Andiyur—outside the distressed tract—was in danger of starvation, I authorized the taluk magistrate to advance what was necessary for bare subsistence and debit the charge to magisterial contingencies. There is no danger any where of failure of supplies. The distress is due merely to a number of people having no stocks of their own, no money with which to buy grain, and no means of obtaining it. To relieve this, all that is necessary is to start relief works, and if this is done soon, we will have good work in return for what we spend. Dry fodder is still available for cattle and loans for wells are being freely given. A special report about the condition of the weavers will be submitted shortly.

ENCLOSURE No. 1.

From H. MOBERLY, Esq., Acting Sub-Collector, Coimbatore, to the Collector of Coimbatore, dated 25th March 1892, Ref. No. 151, Mis.

In your reference on No. 227-Sub. of 1892, you called for a report on the labouring classes in Bhaváni taluk. I have consulted the Police Inspector, the Tahsildar, Deputy Collector Mr. Narayanasamier, who has sent a very interesting report based on personal inquiries and I have just returned from a tour as far as Sampalli, having visited as many villages as possible and made all possible inquiries.

2. The Police Inspector reports that only people residing within the limits of the Bhaváni, Andiyur and Athani Police stations went to Satyamangalam for the paddy harvest; that the labouring classes in the Nerinjipet firka were not able to go to Satyamangalam on account of the distance, and that they are suffering from want of labour. He further reports that, with the exception of a few villages in the limits of Bhaváni and Andiyur Police stations, the crops were so poor that the ryots could not afford to employ coolies to cut, carry and thresh the crops.

3. The Tahsildar's report is to the same effect. He states that the labouring classes say that the relief works which were opened last year afforded relief, but that since they were closed they have suffered much.

4. My personal inquiries convinced me that it is very necessary that relief works should be opened at once. With the exception of the weavers, the labouring classes look fairly well nourished; but one cannot rely on appearances. Many of the labouring classes have been

obliged to pawn or sell not only their jewels but even their brass domestic utensils in order to buy grain for food, and this shows that relief is required. At present, we have no walking skeletons stalking about; but we should not wait till the people are reduced to that condition. If we wait till then, they will not be able to give a proper outturn of work, whereas at present they can work and are willing to work. I therefore beg most earnestly to impress upon you the necessity of opening relief-works at once. Work on the road from Nerinjipett to Cauveripuram, and from Ammapet to Andiyur will afford relief to the people in the worst affected tracts. I would also suggest that ordinary work be started on the road from Andiyur to Athani and from Andiyur to Sellampalaiyam, so as to afford relief to the poorer classes in the west part of the taluk.

* * * * *

ENCLOSURE No. 2.

From H. MOBERLY, Esq., Acting Sub-Collector of Coimbatore, to the Collector of Coimbatore, dated 26th March 1892, Ref. No. 788 R.G.

In continuation of my letter, Reference No. 788 R.G., dated 21st March 1892, regarding the condition of the labouring classes in Bhaváni taluk, I have the honour to forward, in original, Deputy Collector Mr. Narayanasami Iyer's report No. M—Camp of 11th instant. I am much indebted to that gentleman for his careful inquiries and his painstaking report.

2. A few remarks on portions of his report are necessary.

Para. 2.—The ryots did not appreciate the rains which fell on 28th February. They deemed it unseasonable as it would bring up the whiteants and they would destroy what little grass there was. The whiteants have come up and destroyed much of the grass.

Para. 3.—It is necessary, I think, to provide relief for five months certainly. Even if we have showers in April and May and a good south-west monsoon most of the labouring classes will want work. The preparing of the ground and the sowing will not take many days, and the labouring classes will have no work, while the crops are growing. Very few have any stock of grain, and those who have no stock will not in the absence of relief works, have the wherewithal to buy food.

Para. 4.—In this district more than in any district I know, the people are so wedded to their caste and other prejudices, that they would do anything—even die—rather than undertake work which their caste prejudices are opposed to. We must take them as we find them and give them work which they have no objection to undertake. The figures given by the Deputy Collector show that the Tahsildar has been giving his special attention to loan applications, and from what I have seen of his work lately, I am certain he is doing his best to dispose of applications as quickly as possible.

Para. 5.— I have recommended work on the roads from Ammapet to Kaveripuram and Ammapet to Andiyur.

3. A road from Buthapadi market to Mailambadi is not necessary as the Local Fund Engineer has proposed a road from Mailambadi to Theruppur, which will cross the Ammapet-Andiyur road.

4. The proposal to repair four tanks in Mulakkadu, Sampalli and Kolathur is condemned by the ryots and need not be investigated. See my remarks on enclosure 2 to Deputy Collector's letter.

5. The scheme to restore a ruined tank in Kaveripuram, I have not been able to look into. It does not seem very hopeful. Besides wells are better than tanks for contending against famine.

Para. 6.—The "Sammanjee" cloth of the Deputy Collector should be Saunanji (narrow border). The cloth he mentions is an extraordinarily large one and so more expensive than the one I have proposed. The "Thirunagesvaram" cloth I found on inquiry to be too elaborate for our purposes, so I left it out of consideration.

Para. 10. *Fodder.*—I agree with the Deputy Collector. There are stacks of dry fodder all over the place, so at present there is no scarcity of dry fodder.

ENCLOSURE No. 3.

From M R.Ry T. V. NARAYANASAWMY AIYAR Avergal, Deputy Collector of Coimbatore, to the Sub-Collector of Coimbatore, dated Bhaváni, 7th March 1892, No. M—Camp.

With reference to your endorsement, Ref. on No. 235-C.R. of 1892, dated 20th ultimo, I have the honour to inform you that I arrived in Bhaváni the next day after I saw you in Erode; and after a day's halt here, I visited the villages and the markets noted below up to the 6th instant.

Villages visited are—			
1. (16) Kesarimangalam	of the Bhavani Rev. Inspector's firka.	13. (8) Nerinepettai	of the Nerinjipett firka.
2. (17) Kalpavi		14. (10) Ammapettai	
3. (21) Kurichi		15. (12) Budapady	
4. (56) Mailambadi		16. (13) Sengampettai	
5. (57) Varadanallur		17. (18) Paruvachi	of the Andiyur firka.
6. (60) Bhavani		18. (23) Mukasipudur	
7. (1) Cauveripuram	of the Nerinjipett firka.	19. (24) Attavanaipudur	
8. (3) Sengiripatti		20. (25) Puttulur	
9. (4) Kulathur		21. (32) Ennamangalam	
10. (5) Mulakkadu		22. (33) Sankarapalayam	
11. (6) Sampalli		23. (34) Gettisamudram	
12. (7) Navupatti		24. (35) Andiyur	

I am given to understand that these are the bad villages in the taluk. So I did them first and I did not think it necessary to inspect the other villages as I have been asked by the Collector to attend to loan applications in Karur and Dhárápuram taluks. Besides this, the Tahsildar tells me that you are to be here for jamabandi from the 10th instant. During my visit I inspected the garden crop on the ground under wells and the oil-seed plants on dry lands wherever they existed. I inspected also the irrigation wells and those used for drinking water whenever complaints were made to me of deficiency in supply. The number of wells I inspected would be in all about 140. The markets visited are (1) Mailambadi, (2) Puthapaly, (3) Sampalli, and (4) Cauveripuram; the 1st and the second being the most important of the shandies in the taluk.

2. So far as I have seen and heard, I think the parts of the taluk most affected are the villages lying between the Cauvery and the Pachamalai hills, and those lying between the Ammapet-Andiyur road and the same hill, and not covered by the valley between Pachamalai and Barur hills. There are also some villages within one or two miles to the south of the Ammapet-Andiyur road, which have suffered. All these villages are 19 in number as per list (enclosure 1); 12 of these are situated in Nerinjipett firka and 7 in Andiyur. The total occupied area of these villages is 34,395 acres at the time of settlement and 31,708 acres according to last jamabandi, or 54 and 50 square miles, respectively. The number of irrigation wells said to be in good condition in these villages is 818. I do not think that the extent covered by well irrigation would be more than one-twelfth of the occupied lands in these villages on an average. The condition of the garden crops which I saw on the ground is good on the whole. These are generally tobacco, chillies and ragi. They are in excellent condition in selected villages, such as Kurichi, Kulathur, Sampalli and Singeripatti where the wells contain water sufficient for daily watering. In other villages they are moderate and by no means bad. The recent showers about 1½ inches which fell on the 28th ultimo in Cauveripuram, Kolathur, Sampalli, Singaripett. Navapett and Ammapett have done much good to these crops and to the oil-seed plants, especially in Singaripatti. The insufficient supply of water in wells in the villages of Ammapett, Pattur and Ennamangalam in particular has tended to tell upon the luxuriance of the existing crops and operated as a bar to the usual extent being cultivated. I have spoken of the extent and the condition of these crops in order to show what demand of labour they are likely to meet.

3. The population of these 19 villages according to last census is 28,000 in all. Some of these will be engaged in garden lands. As regards the rest, they must have mostly depended upon the late dry crops, ragi and cholum, which are reported to have yielded 4 annas and less in these parts. Some of the ryots, notably those living in Navapett and Sampalli, find remunerative work in going to the hills and cutting bamboos and selling them to the customary dealers in villages. Others find work in carrying sundry articles to the shandies around their places on fixed days and selling one article and buying another at profit. With the exception of these, the rest must feel the absence of demand for labour. I estimate them between 3,000 and 4,000 including pariahs, chucklers and others dependent upon mere cooly work. To these it would be necessary to find labour for the next 4 or 5 months. No cases of unusual migration, except to and fro to the adjacent hills and except among the weaving classes of whom further on, have been reported.

4. There is one thing which I cannot very easily understand, *i.e.*, why if there is real demand for labour, the needy men do not betake themselves to such works as repairs and sinking of wells. The amount paid under the Land Improvement Act from the 1st December last up to date in the taluk is Rs. 13,765, and in all the 19 villages referred to Rs. 5,222-8-0. I have not come across with any ryot class working at any of the wells. The owners always engage professional men called oddars even where the work does not require any skill and consists merely of earth-work. This conduct bears a striking contrast with that of the ryots of the Salem district living on the other side of the river Cauvery, of whom I saw two or three batches engaged in well-sinking work in this taluk. When I asked the ryots and the labouring classes,

they say that the work is one to which they are not accustomed. This does not seem to me to be satisfactory. I take it as showing no pressing demand for labour at present. The well owners have no doubt scruples to employing pariahs for fear they should touch and thereby pollute the water. But there can be no possible objection to pariahs being employed till water level is reached. I wish to draw attention to the extent of loan granted during the last three months, *i.e.*, from 1st December last up to date. The payments made are—

	RS.
Under ordinary rules in 107 cases—	
First instalment	8,752½
Second do.	1,100
Under special well rules in 42 cases—	
First instalment	3,912½
Total ...	13,765

The portion relating to the affected villages is—

	RS.
Under ordinary rules 51 cases—	
First instalment	4,147½
Second do.	550
and under special well rules 7 cases—	
First instalment	525
Total ...	5,222½

The number sanctioned and pending payment of instalment are :—

	In the taluk.	In the affected villages.
	RS.	RS.
Ordinary rules, 83 cases	10,545	4,235
Special well rules, 33 cases	4,525	4,225
Total ...	15,070	8,460

If the Tahsildar will encamp in the parts said to have had poor crops and make prompt and personal inquiries without leaving much in the hands of village officers and Revenue Inspectors, I am sure that the ryots will freely take to loans under the special well rules to dig new wells in favorable localities. Such works must supply labour to those that require it. If, after this is done, it is found that there is still very pressing demand for labour, I would recommend the opening of relief works as noted in the succeeding paragraph.

5. The following works suggest themselves to me :—

(1) Repairing road from Ammapet to Kaveripuram;
(2) Repairing road from Ammapet to Andiyur;
(3) Forming a new road to connect the Buthapadi shandy with that of Mailambadi;
(4) Restoring a chain of four ruined tanks situated in the limits of Kolathur, Mulakkadu and Sampalli; and
(5) Restoring a ruined tank in the limits of Kaveripuram village and taking off two channels from it for wet irrigation.

As regards No. 1, repairs to the road from Nerinjipett to Kaveripuram, this was taken up in November last and partly done. I think it is necessary to put this road into some order. All that I would propose is (1) to remove prickly-pear wherever necessary to keep them from the road margin, (2) to dig side-channels, and (3) to fill in the ruts, if any, in the road with the earth removed from the side-channels. I think it is scarcely necessary to break metal as I do not think that the road need be metalled. This work will supply labour to the persons living on the Cauvery side. As regards No. 2 this was also taken up and stopped in November last. This road will meet the demand of persons living on either side of it. No. 3 is a new proposal to connect the two important markets in the taluk. There is at present an "itteri" or foot-path. This could be converted into a road. The probable distance is 4 miles. As regards No. 4, the restoration of the irrigation tanks which must have been fed by the hill-stream crossing the road about two furlongs from the village site of Sampalli, I beg to enclose copy of my memorandum (enclosure No. 2), from which it will be seen that the hill-stream could be turned to advantage if the four tanks referred to in the memorandum were restored. These works will be really remunerative. As regards No. 5 the same thing can be said. In my memorandum (enclosure No. 3) about this proposal I have referred to the restoration of the ruined tank in Kaveripuram and to the opening of two channels—one on the east and the other on the west. Even though the

western channel were not taken up on the ground of cost and on the ground that the soil of the land that could be irrigated by it being poor, I would recommend the restoration of the tank and the formation of the eastern channel as being easy of achievement. The restoration of the tanks, &c., is one of the works suggested by Mr. Todhunter to improve the condition of the taluk.

6. In regard to weavers, there are no very important centres. There are, however—

60 looms weaving male cloths in Ammapet,
10 do. do. female do. in do.
60 do. do. female do. in Andiyur,

so far as I have seen. I am informed there are weavers in the villages of Jambai, Kavunthampadi, Kurichi and Odathurai in the casba firka ranging from 20 to 200 families. Most of these and some of those living in Anthiyur have also lands from which they have secured crops Their condition cannot therefore be said to be very much affected. Not so is the case of Ammapet weavers. I made inquiries as to the kind of cloth they weave and as to costs, &c. (enclosure No. 4)—*vide* separate memorandum. Sammanjee is one kind of cloth. It is 6½ by 2½ cubits a cloth. The value of thread No. 40 used for four cloths is Rs. 1-11-7; the value of silk used for the same is Rs. 0-8-0; the value of rice for conjee and oil is 1 anna; the wages due to a female to help in manufacturing the cloth is 4 annas. Therefore the whole cost amounts to Rs. 2-8-7. These four cloths are now generally sold for Rs. 3-6-0; they therefore leave a saving of As. 13-5, which is the wages for one week during which these cloths can be made by an ordinary hand. Therefore the cooly for a day for an ordinary hand comes to 2 annas. There is another coarse cloth, Therunagesvaram. My calculation about this cloth and about the female cloth that is woven here gives but a cooly of 2 annas a day to a man working at his own loom. The manufacture of cloths thus leaves a very scanty margin for wages and nothing for gain. With such wages have owners to maintain a family consisting generally of two working and two non-working souls in these times when the prices are double of what they were last year. So owners of looms at which they employed coolies have turned out their coolies and left idle these looms which they cannot themselves do, hence the coolies who had no looms of their own are left to take care of themselves. Some of them, about seven or eight families, have gone to other places, I believe, temporarily, leaving only the weak and infirm behind in charge of their houses.

7. I understand that in November last, when relief works were going on near Ammapet, 14 females and 5 males resorted to the works. The Tahsildar tells me that the males could not have done any manual labour, but were probably employed as head coolies. This is probably a fact, but one man actually told me he was employed in removing prickly-pear from road-side. This state of things was a sure test of the existence of distress among weavers. Ordinarily their case would require special treatment, but unfortunately these classes are not congregated together in considerable numbers either in the same village or in a group of contiguous villages. If this latter fact were no objection, I would recommend that the weavers be afforded relief on the lines sanctioned for Salem. There is one thing in which the weavers here differ from those in Salem. One is able to manufacture coarse cloths used by the lower classes, and that alone, while the others (*i.e.*, Salem weavers) are able to weave cloths used by the higher classes also. I have called on the Tahsildar to get correct information as to the number of looms that were working six months ago and the number that is now actually working. I shall send it on as soon as it is received.

8. In regard to opening poor-houses, this is now too early. There is no unusual influx of beggars, and I do not notice any sign of emaciation in the people from distress.

9. In regard to the resources of the taluk, I had the trade going to the several markets in the taluk registered as far as possible for a market day. The extent of grains received, with information as to whether they were products of the taluk or outside it, is given in the accompanying form (enclosure No. 5). From this it will be seen that the food-grains brought to the market, with the exception of paddy, are in nearly all cases local products. In regard to the Buthapadi shandy I do not quite rely upon the figures given. The village officers, who evidently neglected my orders and failed to keep accounts seem to have drawn upon their imagination and furnished some information. This shandy will only be just as large as the one at Mylambadi. Taking one and the same figures for both the shandies, the quantity received during a day in all the eleven shandies as given in the list is found to be dry grains 19,999 and paddy 32,022, both of them put together being 52,021 Madras measures. Looking to the fact that the total population of the taluk according to the last census was 120,000 in round numbers and they are mostly agriculturists—and looking also to the fact that at the several markets I attended personally there was no lack of supply to meet the demand, I consider the markets are fairly well supplied. I consider also that the stock of food-grains in the taluk is enough to meet its demand. Only the owners do not freely open their stock for sale for fear that their future should be more gloomy. I should not omit to add that the markets in question are located in important and convenient centres, and therefore fairly represent the quantity brought for sale from all the parts of the taluk.

10. Speaking of fodder for cattle, I have no reason to fear that the supply is very deficient. Dry fodder is available everywhere, and though the outturn of crop is reported to be poor I have noticed a number of cholum straw heaps collected in field sheds and huts. I am sure that, if the outturn of crops had been half as good as the outturn of straw, there should be no need or relief operations in this taluk at all.

Read—the following letter from J. STURROCK, Esq., Collector of Coimbatore, to the Secretary to the Commissioner of Revenue Settlement and the Director of the Department of Land Records and Agriculture, dated 29th March 1892, Ref. on No. 707-Bd. :—

In my endorsement of yesterday's date I omitted to say anything about wages, or the source from which the expenditure on relief works in Bhavâni is to be met.

2. I propose to adhere to the rates of wages introduced shortly after the Commissioner's visit to the Coimbatore district in September last, and to ask the District Board at their next meeting to sanction an allotment from the reserve, the work in the meantime being carried on as emergent under the President's order.

3. I have also noticed that I did not forward to the Board the portion of Mr. Moberly's letter in which he speaks most seriously of the condition of the people. It occurs in connection with the weavers, regarding whom I am reporting separately after endeavouring to satisfy myself on a few points. He there says: "most of them are emaciated, they have a pinched look about their faces, and some of them are undoubtedly suffering from want of food."

4. It may be necessary to adopt special measures for the weavers, but the works sanctioned by the Board in yesterday's telegram are close to the weavers' quarters and will afford relief to the most pressing cases.

Resolution—dated 30th March 1892, No. 254.

Submitted for the orders of Government.

2. In the papers read above, the Collector of Coimbatore states that in the Nerinjepett firka of the Bhavâni taluk, and in six villages of the Andiyur firka of the same taluk, the failure of crop has been so extensive that there is a number of persons with no stocks of grain, no money to buy grain, and no means of obtaining it, and that it is therefore necessary to open relief works in that portion of the taluk. The Commissioner has already, in Board's Proceedings, dated 25th September 1891, No. 612, sanctioned the opening of the—

Andiyur-Ammapet
Ammapet-Kaveripuram } roads as relief works.

In the Andiyur firka it is doubtful whether any relief works are really at present necessary, but the Andiyur portion of the first work mentioned will serve as a test work for that portion of the taluk.

3. In the distressed area, the Collector estimates that it will be necessary to afford employment for an average of 1,500 persons for the next six months if the early showers and the south-west monsoon rains come in seasonable amount. This would necessitate an expenditure of about Rs. 27,000. The Collector shows that on the roads selected the unexpended balance of the estimates is Rs. 29,832, and the Commissioner recommends that the works selected may be approved as there appear to be no irrigation works available for relief purposes in the locality. The Commissioner, however, doubts whether it will be necessary to afford relief for so long a period as six months, and considers that for the present it will suffice to provide for employing an average of 2,000 persons for three months. The cost of this would be about Rs. 18,200.

4. It does not appear necessary to provide at present for any gratuitous relief, though later on it may become necessary to open children's kitchens for the children of those employed on the works.

5. The Collector's report regarding relief to be granted to weavers will be awaited.

(True Copies and Extract.)

(Signed) P. RAJARATNA MUDALIAR,
Secretary.

To the Secretary to Government, Revenue Department.
" Collector of Coimbatore.

ORDER—dated 13th April 1892, No. 364, Revenue.

Miscellaneous.

Recorded.

2. The road works selected for relief purposes and referred to in paragraph 3 of the Board's Proceedings are approved. No allotment of funds is necessary with reference to G.O., dated 7th April 1892, No. 1880.

3. The report referred to in paragraph 5 should be submitted to Government when received.

(True Extract.)

(Signed) C. A. GALTON,
Secretary to Government.

To the Commissioner of Revenue Settlement, Land Records and Agriculture.
Copy to the Local and Municipal Department.
" " Public Works Department.

Exd. C. M. Brisson.

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REVENUE.

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157 of 13

DW

G.O., 13th April 1892, No. 364.

APRIL.

Relief works.

Board's Proceedings submitting letter from the Collector of Coimbatore regarding — in the Bhavâni taluk, recorded with remark.

Do

S.E. IV circle

CLASS E.

ROLLING STOCK.

(a).—LOCOMOTIVES.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES.

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4190	16-12-90	Engines, Locomotive—complete.	Compound, six wheels (coupled) with a two-wheeled Bissel truck in front, inside cylinders, 20 inches and 28 inches diameter, inside frames, and separate tenders on two four-wheeled bogie trucks, makers Neilson & Co.	2,875*	0	0	Each.	*Engine ... £2,255 0 0 Tender ... 620 0 0
			One set of duplicates for above	2,709†	10	0	Set.	Total delivered in the port of London 2,875 0 0
			General dimensions of the engines and tenders are as follow :—					†For details see Appendix A., pages 35 and 36.
			Engine.					
			Diameter of H. P. Cylinders ... ... 20 inches.					
			,, L. P. ,, ... 28 ,,					
			Length of stroke ... ... 26 ,,					
			Diameter of coupled wheels ... ... 5 feet 1½ ,,					
			,, of Bissel ,, ... 2 ,, 10 ,,					
			Coupled wheel base ... ... 14 ,, 6 ,,					
			Total wheel base ... ... 20 ,, 7½ ,,					
			Working steam pressure per square inch ... 180 lbs.					
			Heating surface external tubes ... ... 1,119 sq. feet.					
			,, ,, fire box ... ... 113 ,,					
			Total heating surface ... ... 1,232 ,,					
			Grate area ... ... 22 ,,					
			Number of wheels (two four-wheeled bogies) ... 8					
			Wheel base ... ... 18 feet					
			Diameter of wheels ... ... 2 feet 10 inches.					
			Capacity of tank ... ... 3,400 gallons.					
			Fuel space ... ... 300 c. ft.					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—*contd.*	Brake gear—*contd.*	Rings, joint, for 21″ cylinders	0	10	0	Each.	
				,, ,, ,, 18″ ,, ...	0	10	0	,,	
4022	24-10-90 ...			,, rolling, india-rubber, for 18″ cylinder	0	5	6	,,	
				,, ,, ,, ,, ,, 21″ ,, ...	0	6	0	,,	
				Washers, seating, 50 m-m ejector clappet valve	0	0	9	,,	
			Gauges Pressure	Steam, 200 lbs., metal face, not enamelled, 6″ dial	1	1	6	Each.	
3242	14 -2-90 ...			,, ,, ,, ,, ,, ,, 7″ ,, ...	1	5	0	,,	Bourdon's patent.
				,, spare tubes, for H class, heavy L class, and L class engines ...	0	3	6	,,	
3987	21-10-90 ...		Glasses gauge.	Engine 20″ × ¼″ outside diameter	0	5	0	Dozen.	
3560	10 -6-90 ...			,, 18″ × ¼″ ,, ,, ...	0	5	7½	,,	
3223	4 -2-90 ...			,, 14″ × ¼″ ,, ,, ...	0	2	7½	,,	Less discount 40 per cent.
				,, 12″ × ¼″ ,, ,, ...	0	3	0	,,	
3560	10 -6-90 ...			,, 12″ × ¼″ ,, ,, ...	0	3	0	,,	
3796	30 -8-90 ...			,, 12″ × ¼″ ,, ,, ...	0	3	0	,,	
4110	7-11-90 ...			,, 12″ × ¼″ ,, ,, ...	0	3	0	,,	Less discount 37½ per cent.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.	Cwt.	qrs.	lbs.
3569	12 -6-90 ...	Engines, Locomotive—spare parts of—*contd.*	Glass ...	Spectacle, British polished plate, best glazing quality, white, 16½″ diameter × $\frac{5}{16}$″.	0	3	4	Pane.				
3752	1 -8-90 ...		Injectors.	No. 8 m. m.	10	10	0	Each.				
4139	11-11-90 ...			For B. class engines (O. & R. R.)	10	10	0	,,				
			Plates.	*Boiler Barrel, for H class engines.*								
				12′ 8⅛″ × 3′ 6″ × $\frac{7}{16}$″					Estimated weight ...	7	1	20
3965	16-10-90 ...			12′ 10⅛″ × 3′ 6″ × $\frac{7}{16}$″	26	5	0	Ton.	,, ,, ...	7	2	7
				13′ 1⅛″ × 3′ 6″ × $\frac{7}{16}$″					,, ,, ...	7	2	22
				Fire box, copper.								
				Back	14	3	5	Each.	Estimated weight ...	3	1	0
3563	10 -6-90 ...			,, ...	19	7	1	,,	,, ,, ...	4	3	0
4141	11-11-90 ...			,, ...	17	5	0	,,				
3563	10 -6-90 ...			Crown, 3′ 10¼″ × 3′ 2½″ × $\frac{7}{16}$″	8	3	8	,,	,, ,, ...	2	1	0
4141	11-11-90 ...			,, 3′ 10¼″ × 3′ 2½″ × $\frac{7}{16}$″	9	17	6	,,				

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
			Fire box, copper—contd.					
			Crown, plain, flat—					
3222 4-2-90 ...	Engines, Locomotive—spare parts of—*contd.*	Plates—*contd.*	4′ 5″ × 3′ 9″ × $\frac{9}{16}$″ } For H. B. class engines.	14	7	0	Each	
			5′ 2″ × 4′ 0″ × $\frac{9}{16}$″ }	18	1	3	,,	
			Crown and sides—					
3222 4-2-90 ...			15′ 3″ × 4′ 11″ × $\frac{1}{2}$″	60	19	5	,,	
			14′ 9″ × 5′ 1″ × $\frac{1}{2}$″	60	19	5	,,	
			8′ 0″ × 4′ 0″ × $\frac{1}{2}$″	24	8	8	,,	
			6′ 6″ × 4′ 0″ × $\frac{1}{2}$″	20	1	8	,,	
3222 4-2-90 ...			For H. B. class engines	50	11	6	,,	
			For L. ,, ,, ...	58	17	6	,,	
3563 10-6-90 ...			Side, 4′ 4″ × 3′ 10½″ × $\frac{7}{16}$″	11	4	9	,,	Left and right side.
4141 11-11-90 ...			,, 4′ 4″ × 3′ 10½″ × $\frac{7}{16}$	13	4	6	,,	Estimated weight ... Cwt. qrs. lbs. 3 0 10
3222 4-2-90			Tube, 6′ 6″ × 4′ 6″ × $\frac{1}{8}$″ and $\frac{1}{2}$ } Unflanged	33	6	9	,,	
,, 6′ 6″ × 5′ 6″ × $\frac{1}{8}$″ and $\frac{1}{2}$ }				41	15	0	,,	
3563 10-6-90 ...			,, flanged	19	0	11	,,	Estimated weight ... 4 2 10

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
			Fire box, copper—concld.					
			Crown and sides—*concld.*					Cwt. qrs. lbs.
3563 10-6-90 ...	Engines, Locomotive—spare parts of—*contd.*	Plates—*concld.*	Tubes, flanged, ...	26	6	3	Each.	Estimated weight ... 6 1 10
4141 11-11-90			,, ,, ...	21	7	6	,,	
			,, ,, ...	30	17	6	,,	
			Fire box, iron.					
			Side, for B. class engines (E. B. S. R.)	6	8	4	,,	
3383 26-3-90			Front, for B. class engines (E. B. S. R.)	3	6	8	,,	
			,, H. ,, ...	3	3	4	,,	
3180 23-1-90 ...			Tube, flanged, for Kitsons engines	23	0	0	,,	Lowmoor iron, estimated weight 6½ cwt.
3178 ,, ...			,, ,, J. class engine	22	10	0	,,	,, ,, ,, 8 ,,
3516 29-5-90			,, ,, ...	12	15	0	,,	
			,, ,, ...	12	18	11	,,	
4148 11-11-90 ...			,, ,, ...	16	16	0	,,	
3214 3-1-90 ...		Rings ...	India-rubber, for ball and socket water unions, 4⅝″ inside diameter × ⅜″ thick, and 8″ full outside diameter.	9	0	0	%	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3214	3 -1-90 ...	Engines, Locomotive—spare parts of—*contd.*	Rings—*contd.*	India-rubber, for gauge glasses, $\frac{1}{2}$″ hole, $\frac{3}{16}$″ thick	0	17	8	°/₀₀	
3785	23 -8-90			$\frac{1}{2}$″ „ $\frac{3}{16}$″ „	0	15	0	„	
				$\frac{9}{16}$″ „ $\frac{3}{16}$″ „	1	1	6	„	
3520	30 -5-90			$\frac{3}{4}$″ „ internal diameter	1	5	0	„	
				$\frac{1}{8}$″ „ „ „	1	0	0	„	
3984	21-10-90 ...			$\frac{1}{2}$″ for $\frac{9}{16}$″ gauge glass	1	0	10	„	
3940	15-10-90 ...		Sheaves ...	(Or Friction Rollers) cast steel, each 9″ long × 6″ diameter with flanges 2″ high for incline engine plane, each fitted with Hadfield's patent self oiling pedestals.	0	18	6	Each.	
			Tubes.	Boiler, brass—					
				10′ 2¼″ × 1¼″ × 11 and 13 B. W. G.					lbs. 100 tubes = 2,058
				10′ 2¼″ × 1¼″ × 11 and 13 „ for H. B. class engines					100 „ = 2,062
3207	31 -1-90			10′ 9″ × 2″ × 11 and 13 „ K. & S. „ ...	0	0	7¾	lb.	100 „ = 2,486
				10′ 9″ × 1⅝″ × 11 and 13 „ P. „ ...					100 „ = 2,349
				11′ 7¾″ × 1¼″ × 11 and 13 „ L. „ ...					100 „ = 2,344

8

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—*contd.*	Tubes—*concld.*	Boiler, Brass—*concld.*					lbs.
3786	23 -8-90 ...			11′ 7½″ × 1¼″ × 11 and 13 B. W. G.	0	0	8½	lb.	100 tubes = 2,313
3207	31 -1-90 ...			12′ 3½″ × 2″ × 11 and 13 „ for Q. Class Engine ...	0	0	7¾	„	100 „ = 2,839
3420	29 -4-90 ...			13′ 2″ long, 2″ diameter outside, No. 9 and 12 B. W. G. thick ...	0	0	8	„	100 „ = 3,602
4119	13-11-90 ...			Boiler, brass	0	0	8½	„	100 „ = 1,970
3565	10 -6-90 ...			„ „	0	0	8	„	
3177	22 -1-90 ...			Mild steel, locomotive, 10′ 1½″ × 3″, expanded to 3¼″ at end for a length of 3″, and 12 B. W. G. throughout.	0	14	4	Each.	
			Tyres.	Bogie } for H. B. class engine	3	8	9	Each.	
				Engine } for H. B. class engine	7	0	6	„	
				Bogie }	3	14	6	„	
3171	15 -1-90			Engine } „ „ „	7	15	4	„	
				Tender }	4	15	6	„	
				Engine, leading }	8	17	6	„	
				„ driving } for K. and S. class engines	8	17	6	„	
				Tender }	5	5	0	„	

6

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3171	15 -1-90 ...	Engines, Locomotive—spare parts of—*contd.*	Tyres—*contd.*	Bogie } for L. class engines	3	8	9	Each.	
				Engine, leading } for L. class engines	6	7	6	,,	
				,, middle } for L. class engines	6	6	0	,,	
				,, trailing } for L. class engines	6	7	6	,,	
				Tender } for L. class engines	4	4	0	,,	
4145	11-11-90 ...			Driving } for J. class engines	8	4	3	,,	
				Leading } for J. class engines	8	4	3	,,	
				Trailing } for J. class engines	8	4	3	,,	
				Steel, for locomotive and tender wheels	4	12	6	,,	

CLASS OF STORES. E.—ROLLING STOCK SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3760	6 -8-90 ...	Engines Locomotive—spare parts of—	Axles.	Leading, driving, and trailing, for F class engines, with cranks finished complete, with the exception of the wheel seats, where an allowance of ¼″ in diameter is left for finishing in India	52	13	4	Set.	
3735	24 -7-90 ...			Leading, best fagotted iron	10	0	0	Pair.	
3760	6 -8-90 ...		Boilers.	Locomotive, for F class engines fitted with smoke-boxes, smoke box doors, chimneys, fire bars, and bearers and all mountings, fitting, and clothing complete, ready to put in frames	448	13	4	Each.	To suit engines supplied under contract E 302.
3760	,, ...		Cocks.	Gauge, column, asbestos packed, for F class engine	7	2	0	Set.	Dewrances patent.
3941	21 -1-90 ...		Cranks.	Driving, for axles } for A class engines	11	10	0	Each.	
				Trailing } for A class engines	11	10	0	,,	
3470	15 -5-90 ...		Cross heads.	Piston, right and left hand, for new F class engines	38	0	0	Pair.	
3760	6 -8-90 ...		Cylinders.	Right and left, finished, complete with glands, &c., and covers complete, for F class engines	79	0	0	Pair.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4023	24-10-90 ...	Engines, Locomotive, spare parts of—*contd.*	Gauges, Pressure.	*Steam, Bourdon's, to register up to 200 lbs. with brass cases, 7″ diameter central hand, without couplings, nipples ⅜″ diameter screwed, 18 threads per inch*	1	0	6	Each.	
3315	3 -3-90 ...			Steam, Bourdons, to register up to 200 lbs. dials, 7″ diameter	1	2	6	,,	
3499	24 -5-90 ...			,, ,, ,, ,, ,, ...	1	2	6	,,	With gun metal cocks and tail pipes.
3689	8 -7-90 ...			,, ,, ,, ,, 6″, tubes for ...	0	7	9	,,	
			Glasses Gauge.	For Locomotive Engines—					
3987	21-10-90 ...			7⅛″ × ⅜″ external diameter, for O class engines	0	2	3	Dozen.	
				8″ × ⅜″ external diameter, for A class engines	0	2	3	,,	
4160	17-11-90 ...			8″ × ⅜″ ,, ,, plain	0	3	4½	,,	
3987	21-10-90 ...			8¼″ × ⅜″ ,, ,, for F class engines	0	2	4½	,,	
4160	17-11-90 ...			9″ × ⅜″ ,, ,, plain	0	2	6	,,	Less 40 per cent. discount.
3987	21-10-90 ...			9½″ × ⅜″ ,, ,, for E class engines	0	2	6	,,	
3471	15 -1-90 ...			10½″ × ⅜″ ,, ,, plain	0	2	7½	,,	
				15½″ × ⅜″ ,, ,, ,, ...	0	3	10½	,,	
				31½″ × ⅜″ ,, ,, ,, ...	0	7	10½	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*.)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3752	1-8-90 ...	Engines, Locomotive—spare parts of—*contd.*	Injectors.	Right and left hand	9	15	0	Set.	
3473	15-5-90 ...			,, ,, for F class engines	9	15	0	,,	Gresham's patent.
3752	1-8-90 ...			Brass rams, for—	2	5	0	,,	
3352	18-3-90 ...		Pins	Split Cotter—					
				Long diameter					
				1″ × ½″	0	0	5	Gross.	
				1¼″ × ½″	0	0	5¼	,,	
				1½″ × ½″	0	0	6	,,	
				1½″ × 3/10″	0	0	7½	,,	
				2″ × 3/16″	0	0	9	,,	
				2½″ × 3/16″	0	0	10½	,,	
				3″ × 3/16″	0	1	0½	,,	
				3″ × ¼″	0	1	7½	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4023	24-10-90 ...	Engines, Locomotive, spare parts of—*contd.*	Gauges, Pressure.	*Steam, Bourdon's, to register up to 200 lbs. with brass cases, 7" diameter central hand, without couplings, nipples ⅛" diameter screwed, 18 threads per inch*	1	0	6	Each.	
3315	3 -3-90 ...			Steam, Bourdons, to register up to 200 lbs. dials, 7" diameter	1	2	6	„	
3499	24 -5-90 ...			„ „ „ „ „	1	2	6	„	With gun metal cocks and tail pipes.
3689	8 -7-90 ...			„ „ „ „ 6"; tubes for ...	0	7	9	„	
			Glasses Gauge.	For Locomotive Engines—					
3987	21-10-90 ...			7⅛" × ⅛" external diameter, for O class engines	0	2	3	Dozen.	
				8" × ⅛" external diameter, for A class engines	0	2	3	„	
4160	17-11-90 ...			8" × ⅛" „ „ plain	0	3	4½	„	
3987	21-10-90 ...			8¼" × ⅛" „ „ for F class engines	0	2	4½	„	
4160	17-11-90 ...			9" × ⅛" „ „ plain	0	2	6	„	Less 40 per cent. discount.
3987	21-10-90 ...			9½" × ⅛" „ „ for E class engines	0	2	6	„	
				10½" × ⅛" „ „ plain	0	2	7½	„	
3471	15 -1-90 ...			15½" × ⅛" „ „ „	0	3	10½	„	
				31½" × ⅛" „ „ „	0	7	10½	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*.)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3752	1-8-90 ...	Engines, Locomotive—spare parts of—*contd.*	Injectors.	Right and left hand	9	15	0	Set.	
3473	15-5-90 ...			„ „ for F class engines	9	15	0	„	Gresham's patent.
3752	1-8-90 ...			Brass rams, for—	2	5	0	„	
3352	18-3-90 ...		Pins	Split Cotter—					
				Long diameter					
				1" × ⅛"	0	0	5	Gross.	
				1¼" × ⅛"	0	0	5½	„	
				1½" × ⅛"	0	0	6	„	
				1⅝" × 5/16"	0	0	7½	„	
				2" × 5/16"	0	0	9	„	
				2½" × 5/16"	0	0	10½	„	
				3" × 5/16"	0	1	0½	„	
				3" × ¼"	0	1	7½	„	

CLASS E.

ROLLING STOCK.

(b).—COACHING AND GOODS STOCK.

(1) Complete Ironwork for Vehicles

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES.

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4093	6-11-90 ...	Brake Vans, 19 feet 3 inches long.	Underframe and body steel and iron work, roofing, lavatory, metallic fittings, underframe, and panel pins, for brake vans, with 6 wheels ... ... For detailed rates, see Appendix H.	160	0	0	Set	Note.—The cost per set does not include the price of wheels and axles, bearing and draw, and buffer springs, india-rubber window cushions, Attock's blocks, lamps, and axle boxes.
4131	8-11-90 ...	Carriages, first class, 24 feet 2 inches long.	Underframe, underframe and body steel and iron work, roofing, lavatory, and metallic fittings, and panel pins, for first class carriage complete. *Estimated weight, 3-5-2-23.*	199	10	0	Set.	
4131	8-11-90 ...	Carriages, second class, 24 feet 2 inches long.	Underframe, underframe and body steel and iron work, roofing, lavatory and metallic fittings, and panel pins, for second class carriages complete.	199	10	0	Set.	
4177	4-12-90 ...	Cranes, Accident	Travelling, mounted on steel truck, and suited to lift and slue a weight of 10 tons, at a maximum radius of 16 feet from the centre of the crane to the centre of chain, at a height of 23 feet 6 inches. Wheels 6 in number.	545	0	0	Each.	
4093	6-11-90 ...	Wagons, Ballast, 19 feet 3 inches long.	Underframe, underframe and body steel and iron work, for ballast wagons For detailed rates see Appendix H.	100	15	0	Set.	
3310	1-3-90 ...	Wagons, Covered Goods, 19 feet 6 inches long.	Underframe, underframe and body steel and iron work, for covered goods wagons. (Details given in the Contract.)	140	15	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3423	1-5-90 ...	Brake Vans, 18 feet long.	Underframe, underframe and body steel and ironwork, lavatory and metallic fittings, trimmings, and window glass (wheels 2 ft. 4 inches diameter.)	116	16	0	Set.	
			Inside dimensions.					
			Length ... ... 17 feet 4 inches.					
			Width ... ... 6 „ 4 „					
			Height, centre ... ... 6 „ 6½ „					
3933 *	10-10-90 ...	Carriages, Composite	Underframe, underframe and body steel and ironwork, roofing and metallic fittings, for composite (first and second class) carriages.	73	15	0	Set.	The invoice prices for the composite and third class carriages are just the same.
3423	1-5-90 ...	Carriages, first class	Underframe, underframe and body steel and iron work, lavatory and metallic fittings, trimmings, and window glass, for first class or inspection carriage, with end doors (wheels 2 ft. 4 inches diameter.)	177	10	0	Set.	
3933	10-10-90 ...	Carriages, 3rd class.	Underframe, underframe and body steel and iron work, roofing, and metallic fittings, for third class carriages	73	15	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES—*concld.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3154	2-1-90 ...	Cranes.	Accident, travelling, mounted on steel trucks, suited to lift and slue a weight of five tons at a maximum radius of 16 feet from centre of pillar to centre of chain	372	10	0	Each.	Extra price free on board shipped from Tyne £ 3-5-0.
			Accident, travelling, mounted on steel truck, suited to lift and slue a weight of 10 tons	525	0	0	„	Extra price free on board shipped from Tyne £ 4-5-0.
3404	5-4-90 ...	Wagons, Ballast, 14 feet long.	Underframe, and steel and iron work, for underframes and bodies for low sided or ballast wagons with wood side and ends	59	0	6	Set.	Cwt. qrs. lbs. Estimated total weight 34 1 18
3404	5-4-90 ...	Timber Truck, 14 feet long.	Underframe and body, steel and iron work, complete for timber truck, 14 feet long with two fixed Bosters	68	0	0	Set.	Ditto ditto 37 3 14
3783	„ ...	Wagons, Jute, 14 feet long.	Bogie underframe, and body steel and iron work, &c., for jute wagons ...	38	14	0	Set.	For Kaunia-Dharla Railway 2′ 6″ gauge.

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(2) Ironwork.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK.

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3179	23 -1-90 ...	Axles.	*Bogie*, carriage and wagon, wheel seats rough turned	5	5	8	Each.	Taylor Brothers.
			Ordinary „ „ „	5	2	2	„	
3535	3 -6-90 ...		Iron, 5½″, journal 4¼″ diameter when finished	4	18	10	„	Lowmoor Company.
4146	11-11-90 ...		„ 5½″ diameter at centre, journal 4¼″ diameter × 9″ long when finished.	5	0	3	„	Taylor Brothers.
3208	30 -1-90 ...	Axle Boxes.	Without brasses, 9″ × 4″, leather washers, wrought iron shields and set screws.	0	13	0	Each.	
3282	24 -2-90 ...		„ „ „ „ „	0	12	0	„	
4161	17-11-90 ...		With gun-metal bearings, leather washers, wrought iron shields, and set screws complete.	1	2	3	„	
3173	16 -1-90 ...	Couplings.	Screw, with shackles, pins, and collars, complete	1	12	7	Each.	
3489	23 -5-90 ...		„ with three shackles, pins, and washers, complete	1	11	9	„	
3488	23 -5-90 ...		„ „ „ „ ...	1	12	7½	„	
3753	1 -8-90 ...	Body Ironwork—spare parts of—	Iron, corrugated, galvanized, curved, for carriage roof	15	2	6	Ton.	
3566	10 -6-90 ...		Iron sheets, for panels of sizes	16	15	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £.	s.	d.	Unit.	Remarks.
		Bearing, for carriages	1	18	10	Each.	
3152 2-1-90 ...		,, 11 plates, 4′ wide	1	17	3	,,	
		,, for wagons	1	0	10	,,	
		,, eliptical, bogie (in groups of 3)	2	11	2	,,	
3278 22-2-90 ...		Bearing, for carriages and wagons	1	2	11	,,	Timmis' patent.
3158 7-1-90 ...		Buffer, with malleable C. I. washers and steel ferrules	0	5	3¾	,,	
3946 15-10-90 ...	Springs.	,, spiral	0	9	5	,,	
3278 22-2-90 ...		,, volute	0	7	5	,,	
		,, Timmis patent, unequal section	0	12	0	,,	
		For draw bars—					
		4″ deep × 2½″ hole B	0	7	3	,,	
		8″ ,, × 1¾″ ,, H 2	0	8	0	,,	
3159 6-1-90 ...		8¼″ ,, × 2½″ ,, C	0	7	6	,,	
		9½″ ,, × 2¼″ ,, ...	0	7	9	,,	
		10″ ,, × 2″ ,, H	0	7	0	,,	
		16″ ,, × 1½″ ,, D	0	8	6	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £.	s.	d.	Unit.	Remarks.
3278 22-2-90 ...	Springs—*contd.*	Draw Volute	0	8	6	Each.	
3561 10-6-90 ...		,, ,, for draw hooks	0	5	6	,,	
		B 2	0	7	6	,,	
		D 2	0	12	0	,,	
		E 2	0	8	0	,,	
3159 6-1-90 ...		F	0	5	6	,,	
		G 2	0	8	3	,,	
		H 2	0	7	6	,,	
		I or J	0	7	0	,,	
		K	0	7	6	,,	
3152 2-1-90 ...		Triple coil, nest, bogie	0	13	6	,,	
	Tyres.	Bessemer, for bogie carriage, and wagons	2	7	9	Each.	
3169 15-1-90 ...		,, I. S. R. type for ,, ...	2	17	8	,,	
		,, 3′ 2⅝″	2	14	4	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4133	10-11-90 ...	Underframes, set complete.	Underframe, underframe steel and ironwork, and ironsheet, for panels, for Post Office and third class carriages combined, 28 feet long.	84	10	0	Each.	Total weight of steel and ironwork. Cwt. 59 qrs. 2 lbs. 7
3393	28-3-90 ...		Underframes, iron, without buffers, scroll irons, axle guards, bearing springs, footstep brackets, &c., for carriages, rivetted up complete.	43	2	6	,,	Total weight of steel and ironwork. 33 1 13
		Underframe ironwork—spare parts of—	*Brake gear, Automatic Vacuum, for—*					
			Brake vans, 24 feet long, with piping	44	0	0	each.	Including Brake rigging.
			,, 24 feet long, without piping	37	14	0	,,	Including Brake rigging.
			Composite carriages, 24 feet long					
3974	21-10-90 ...		Horse boxes ,, ...					
			Luggage vans ,, ...	38	0	0	,,	Including Brake rigging.
			Second class carriages ,, ...					
			Store vans ,, ...					
			Third class carriages, 27′ 4″					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
			Brake gear, Automatic, Vacuum —spare parts of—					
		Underframe ironwork—spare parts of—*contd.*	Cradles	1	11	10	Each.	
			Draw bars, for carriage and wagon—					
			Draw bars, A size	1	16	7	,,	
4019	23-10-90		,, ,, B ,, ...	2	11	10	,,	
			,, ,, C ,, ...	2	18	3	,,	
			,, ,, F ,, ...	2	0	8	,,	
			,, ,, G ,, ...	2	3	11½	,,	
			Diaphragm valve ball (new pattern)	0	1	0	,,	
4022	24-10-90		,, van valve	0	1	9	,,	
			Hose pipe, with couplings 27″ × 2″	1	15	0	,,	For all vehicles.
3212	30-1-90		Pipes or hose, with couplings complete...	1	15	0	,,	
			,, ,, without couplings	0	13	0	,,	
4022	24-10-90 ...		Joints, insertion, for ball valve	0	0	3	,,	
3874	2-10-90 ...		Piping, with hose, coupling, &c., complete in lengths of 27 feet, for 3rd class carriages.	6	6	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4022	24-10-90	Underframe ironwork—spare parts of—*contd.*	*Washers, coupling, for 2″ couplings, 27 feet long*	0	0	8	Each.	
			,, ,, ,, 1″ ,, ...	0	0	5	,,	
			,, seating, for van valve	0	0	9	,,	
3173	16-1-90 ...		Steel castings, bogie centre, finished, but without pins	8	11	6	Set.	This includes 2 pairs castings to a set.
4168	24-11-90 ...	Wheels and Axles...	Complete, for carriages and wagons	17	5	0	Pair.	
4169	24-11-90 ...		,, ,, ,, ,, ,, ...	17	7	6	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2). IRONWORK—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3414	14-4-90 ...	Axle Boxes.	With gun metal bearings, leather washers, wrought iron shields, and set screws complete.	0	16	9	Each.	
3763	12-8-90		With gun metal bearings, leather washers, wrought iron shields and set screws, to suit $6\frac{5}{16}″ \times 2\frac{3}{4}″$ journals.	0	18	9	,,	
3858	27-9-90 ...		With gun metal bearings, leather washers, wrought iron shields, and set screws, to suit 7″ × 3″ journals.	0	18	9	,,	
3764	13-8-90 ...		With gun metal bearings, leather washers, wrought iron shields, and set screws, for carriages.	0	18	0	,,	
4021	24-10-90 ...	Body, Iron work—spare parts of—	With gun metal bearings, leather washers, wrought iron shields, and set screws, for jute wagons (2′ 6″ gauge).	0	18	2	,,	
3329	8-3-90 ...		Iron sheets, galvanized, corrugated, curved, 8 feet 6 inches long, to cover a width of 2′ 3″.	14	0	0	Ton.	
3411	14-4-90	Springs.	Plates, planished, for panels of carriages, 8′ $9\frac{1}{2}″$ × 2′ $4\frac{1}{2}″$ × 12 B. W. G ...	0	16	$7\frac{1}{2}$	Cwt.	
			Bearing, for brake vans	1	7	6	Each.	
			,, carriages	1	5	6	,,	
			,, wagons	0	11	3	,,	
3771	14-8-90 ...		,, ,, ...	0	14	0	,,	
3782	22-8-90 ...		,, ,, ...	0	17	0	,,	

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
3605	23 -6-90 ...	Springs—*concld.*	Bearing, tension, for brake vans, 11 plates	1	7	0	Each.	
3813	9 -9-90 ...		„ „ „ 11 plates	1	7	0	„	Standard size.
3485	20 -5-90 ...		Buffers, 7″ long, for carriages	0	6	9	„	
3411	14 -4-90 ...		„ volute	0	6	8	„	
3771	14 -8-90 ...		„ for carriages and wagons	0	8	0	„	
3765	14 -8-90 ...		Coiled, for buffer and draw gear	0	6	9	„	
3554	9 -6-90 ...		Spiral, for bogie underframe, for first class carriages	0	5	9	„	
3946	15-10-90 ...		„ buffer	0	9	5	„	
3478	16 -5-90	Underframe iron work—spare parts of—	Buffer, central, with hooks, for carriages	2	2	0	Each.	
			„ „ with chain, for „	1	16	6	„	
3992	21-10-90 ...		„ screw, complete	6	2	0	„	Rendel's design.
3279	24 -2-90 ...		Sockets, spring, wrought iron, out-side	0	9	9	„	
3412	14 -4-90 ...	Wheels and axles.	Complete, for carriages and wagons	10	12	0	Pair.	
3859	29 -9-90 ...		„ „ „	8	15	0	„	
4191	16-12-90 ...		„ „ „ journal 7″ × 3″	8	16	0	„	
3776	16 -8-90 ...		„ „ „	6	4	0	„	For Jorhat Railway (2 ft. 6 inch gauge.)

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(3) Metallic and other Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (3).—METALLIC AND OTHER FITTINGS.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3601 21-1-90 ...	Basins ...	Washing, earthenware, with pipes, plugs and chains complete	1	0	3	Each.	
3434 8-5-90 ...	Gauze ...	Copper wire, 34 mesh, wire 32 S. W. G., 3 feet wide	0	1	2½	L. ft.	
3742 26-7-90 ...		Iron wire, wove, galvanized, 7 meshes to 2 lineal inches, each piece 30′ × 2′ 6″.	0	0	3¼	S. ft.	
3924 10-10-90 ...	Glasses ...	Looking, 18″ × 18″ × ¼″ thick, ground and polished, with teak wood frames, 1′, 8¼″ square, 1½″ wide and ⅝″ thick.	0	16	0	Each.	
	Glass.	*Plate, best glazing quality, British polished.*					
4143 11-11-90 ..		Fluted, 17″ × 16″ × ⅛″ thick	0	0	9½	Pane.	
3431 6-5-90 ...		Ground, 18½″ × 14″ × $\frac{3}{16}$″ ,, ...	0	3	1	,,	For inspection carriage.
3442 8-5-90 ...		,, 18″ × 16″ × $\frac{3}{16}$″ ,, ...	0	3	2½	,,	For bath room.
4151 14-11-90 ...		Neutral tinted, 24″ × 18¾″ × $\frac{3}{16}$″ ,, ...	0	8	8½	,,	22 lbs. per sq. foot.
3163 9-1-90 ...		,, ,, 22″ × 17″ × $\frac{3}{16}$″ ,, ...	0	6	0¼	,,	
		,, ,, 22″ × 14″ × $\frac{3}{16}$″ ,, ...	0	5	0	,,	
		,, ,, 20″ × 20″ × $\frac{3}{16}$″ ,, ...	0	6	5¾	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK
(3). METALLIC AND OTHER FITTINGS—*contd.*

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4151 14-11-90 ...	Glass—*contd.*	*Plate, best glazing quality, British polished*—contd. Neutral tinted 19″ × 18″ × $\frac{3}{16}$″ thick	0	6	6½	Pane.	
4151 14-11-90 ...		„ „ 18¼″ × 18″ × $\frac{3}{16}$″ „	0	6	6½	„	
3403 5 -4-90 ...		„ „ 18½″ × 18¼″ × $\frac{3}{16}$″ „	0	5	10	„	
3400 5 -4-90 ...		„ „ 18¼″ × 18¼″ × $\frac{3}{16}$″ „	0	5	10	„	
3163 9 -1-90 ...		„ „ 18″ × 14″ × $\frac{3}{16}$″ „	0	4	1	„	
		„ „ 12″ × 12″ × $\frac{3}{16}$″ „	0	2	4	„	
3569 12 -6-90 ...		White, 28″ × 7¼″ × ¼″ thick	0	2	0½	„	
4143 11-11-90 ...		„ 28″ × 7½″ × ¼″ „	0	2	0½	„	
3569 12 -6-90 ...		„ 24″ × 18¾″ × $\frac{3}{16}$″ „	0	5	7½	„	
4143 11-11-90 ...		„ 24″ × 18½″ × $\frac{3}{16}$″ „	0	5	6	„	
3569 12 -6-90 ...		„ 24″ × 18″ × $\frac{3}{16}$″ „	0	5	2	„	
4143 11-11-90 ...		„ 24″ × 18″ × $\frac{3}{16}$″ „	0	5	0½	„	
3569 12 -6-90 ...		„ 24″ × 17½″ × $\frac{3}{16}$″ „	0	5	2	„	
4143 11-11-90 ...		„ 24″ × 17½″ × $\frac{3}{16}$″ „	0	5	0½	„	
3569 12 -6-90 ...		„ 24″ × 12″ × $\frac{3}{16}$″ „	0	3	4	„	
4143 11-11-90 ...		„ 24″ × 12″ × $\frac{3}{16}$″ „	0	3	3	„	
3569 21-10-90 ...		„ 24″ × 7″ × ¼″ „	0	1	6½	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK
(3).—METALLIC AND OTHER FITTINGS—*concld.*

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4143 11-11-90 ...	Glass—*concld.*	*Plate, best glazing quality, British polished*—concld. White 24″ × 7″ × ¼″ thick	0	1	6½	Pane.	
3999 21-10-90 ...		„ 22″ × 15″ × $\frac{3}{16}$ „	0	4	4½	„	
3569 12 -6-90 ...		„ 19″ × 18″ × $\frac{3}{16}$″ „	0	4	1	„	
4143 11-11-90 ...		„ 19″ × 18″ × $\frac{3}{16}$″ „	0	4	0	„	
3569 12 -6-90 ...		„ 19″ × 16″ × $\frac{3}{16}$″ „	0	3	7½	„	
4143 11-11-90 ...		„ 19″ × 16″ × $\frac{3}{16}$″ „	0	3	6½	„	
3431 6 -5-90 ...		„ 18½″ × 14″ × $\frac{3}{16}$″ „	0	3	1	„	For brake vans.
3442 8 -5-90 ...		„ 18″ × 16″ × $\frac{3}{16}$″ „	0	3	2½	„	For windows.
3902 9-10-90 ...	Handles ...	Brass, carriage door, with locks and plates, left hand	0	3	0	Each.	
3505 24 -5-90 ...	Hasps and Staples	Iron 6″	0	0	6	Each.	
3505 24 -5-90 ...	Hooks ...	Jhilmill, wrought iron, for carriage venetians	0	8	4	% Pairs.	
3991 21-10-90 ...	Tiles ...	Porcelain, plain, for roof lamp reflectors	0	4	8	Each.	
		„ with monogram „	0	5	0	„	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(4)—India Rubber Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (4)—INDIA RUBBER FITTINGS.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3539	5 -6 -90 ...	Blocks, India rubber.	Vulcanized, for carriage bodies 9″ × 3″ × 1″ with $\frac{1}{16}$″ holes	0	3	2	Each.	Attock's Patent
4164	19-11-90		,, ,, ,, ,, 9″ × 3″ × 1″ × $\frac{1}{16}$″ holes	0	3	3	,,	
			,, ,, ,, ,, ...	0	2	7	,,	
3410	14- 4-90 ...		,, ,, ,, ,, ...	0	1	10½	,,	
3860	29- 9-90 ...		,, ,, ,, ,, ...	0	2	0	,,	
3410	14- 4-90 ...	Cushions, India rubber.	Vulcanized, for window sashes	1	7	1	%	
3539	5- 6-90		,, ,, glass panes, bottom	1	13	4	,,	
			,, ,, ,, ,, side	0	16	8	,,	
4164	19-11-90		,, ,, glass panes, bottom	1	13	4	,,	
			,, ,, ,, ,, side	0	16	0	,,	
3483	20- 5-90 ...		,, ,, window sashes	1	7	1	,,	
3498	24- 5-90 ...		,, ,, ,, ,, ...	1	5	0	,,	
3318	24- 5-90 ...		,, ,, ,, ,, ...	1	5	0	,,	
3860	29- 9-90 ...		,, ,, ,, ,, ...	1	9	2	,,	
4164	29- 9-90 ...		,, ,, ,, ,, ...	1	5	0	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (4)—INDIA RUBBER FITTINGS—*concld.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3410	14-4-90 ...	Rings ...	Buffer	0	14	6	Each.	
3498	24-5-90 ...	Springs ...	India rubber, for window sashes	1	10	0	%	
3539	5 -6-90 ...	Tyres ...	India rubber, for wheels of luggage trucks	0	9	7	Each.	
3483	20-5-90 ...	Washers ...	Vulcanized, India rubber, for Rendell's patent screw buffer	0	2	0	Each.	
3860	29-9-90 ...		,, ,, ,, 6″ diameter by 2″ hole, 2″ thick, for engine buffer...	0	5	8	,,	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(5)—Trimmings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3451	13- 5-90 ...		Covered with rep	0	1	5	Gross.	
3477	16- 5-90	Buttons ...	Buff color, hide, for carriage cushions	0	1	7	„	
			Green morocco „ „ „	0	0	8	„	
3311	1- 3-90	Carpets ...	Dark green ground, fern pattern, 12′ 6″ × 6′ 0″	2	14	8	Each.	Suitable for first class saloon carriage.
			Plain, 5 frame, brussels, without border, to pattern 3145-2 but with darker ground.	3	2	3	„	
3445	8- 5-90 ...	Cloth.	Baize, green, for lamp shades, 2′ wide	0	3	6	L. yd.	
3464	5- 5-90 ...		Brown holland, 54″ wide, best	0	0	10¾	„	Weight 11½ oz. per yard.
3297	28 -2-90 ...		Canvas, common, 36″ wide, plain without coloured stripes	0	1	2⅜	„	
3464	15- 5-90 ...		„ „ 36″ wide	0	0	8¾	„	
3429	6- 5-90		„ prepared for roofing, 19′ 0″ × 8′ 6″	2	5	0	Piece.	
			„ „ „ „ 19′ 6″ × 9′ 0″	2	8	9	„	For inspection carriage and brake vans.
3451	13- 5-90 ...		Carriage, rep, maroon, 54″ wide, all wool	0	5	6	L. yd.	
3317	5- 3-90 ...		Floor, 3′ wide	0	2	9	„	Suitable for first and composite carriages.
3418	26- 4-90 ...		„ 3′ „	0	2	9	„	
3570	12- 6-90 ...		„ 22′ 4″ × 8′ 4″	3	5	0	Piece.	
4153	14-11-90 ...		„ 22′ 4″ × 8′ 4″	4	0	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS—*contd.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3332	11-3-90 ...	Hair, Horse ...	Curled and coiled	8	8	0	Cwt.	
3636	1 -7 -90 ...		" " "	8	8	0	"	
3437	8 -5 -90 ...	Hides ...	Buffallo, buff colour, french grained, hand buffed, to average 56 square feet per hide.	0	1	0	Sq. foot.	Lion Brand.
3631	30-6 -90 ...		Horse, white, to average 18 lbs. per hide	0	1	8	lb.	
3451	13-5 -90 ...	Lace ...	Seaming, to match rep	0	0	2	L. yd.	
4051	30-10-90 ...	Linerusta Walton	Mounted on cloth, 36′ × 1′ 7½″, of a pale buff colour, with monogram embossed on it, with a small pattern—suitable for the roof of 1st class carriages.	1	6	9	Piece.	
3436	8 -5 -90 ...	Log Line ...	⅛″ diameter, in 1 lb. balls	0	1	0	lb.	
3482	20-5 -90 ...	Netting ...	Silk, cord, maroon colour, 10″ wide and 1″ mesh	0	1	8	L. yd.	
4032	25-10-90 ...		" " " " 9″ mesh in 25-yard lengths	0	1	0½	"	For hat rack.
3338	13-3 -90	Pins ...	Wire, gimp, trimming, black ½″	0	0	6	lb.	
			" " " " ¼″					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS—*concld.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3571	12-6-90 ...	Skins ...	Morocco, grained, maroon colour, cowhide, to average 46 sq. feet per hide ...	0	1	0	Sq. ft.	
3879	3-10-90 ...	Spring ...	Spiral, steel, copper plated, 6″ in height at rest, No. 10 S. W. G., for 1st class carriage seats.	0	0	1½	Each.	
3313	1 -3-90	Tacks.	Cut, black, flat heads, sharp points, fine, ½″	0	0	2¼	lb.	
			" " " " " " " ¾″	0	0	2	"	
			Cut, tinned " " " " " ½″	0	0	3½	"	
3896	8-10-90		Flemish, black, fine, ½″	5	9	0	Cwt.	
			" " " ¾″	3	7	0	"	
3435	8 -5-90 ...	Thread.	Linen, black, No. 35, 3 cord, in ½ oz. skeins	0	2	2	lb.	
3593	19-6-90		Linen, dark yellow, machine, sewing, on 4 oz. reels No. 18	0	1	11	"	
			" white " " 4 oz. " "	0	2	2	"	
3541	5 -6-90 ...		Flax, fine, shoe, in 2 oz. balls and 3 lb. papers	0	1	2½	"	
3897	8-10-90 ...		" " sewing, in 2 oz. balls and 3 lb. papers	0	1	2½	"	
3691	8 -9-90 ...		" " shoe 2 oz. " " 3 lb. "	0	1	2½	"	
3436	8-5-90 ...	Twine ...	Sailmakers	0	1	2	lb.	

Appendix A.

Detail of one set of duplicates for compound engines and tenders six wheels (coupled) 5′ 6″ gauge, as supplied under Contract No. 4190, dated 16th December 1890, for the East Coast Railway—vide *page 1.*

Description of Stores.	Quantity.	Rate each delivered F. O. B. in the Port of London.	Port of Liverpool or Birkenhead.	Port of Glasgow.
		£ s. d.	£ s. d.	£ s. d.
Engine.				
Engine frames	1 pair	47 0 0	46 0 0	44 0 0
Wheels and axles	1 set	380 0 0	370 0 0	360 0 0
Tyres	1 „	70 0 0	68 0 0	66 0 0
Axles	1 „	139 0 0	137 0 0	135 0 0
Crank pins	1 „	9 0 0	8 15 0	8 10 0
Bearing springs for (Bissel), leading, driving and trailing wheels.	3 sets	72 0 0	71 0 0	70 0 0
Axle boxes, complete	1 set	57 0 0	56 0 0	55 0 0
Connecting rods	1 „	39 0 0	38 10 0	38 0 0
Coupling rods	1 „	46 0 0	45 10 0	45 0 0
Slide bars	1 „	50 0 0	49 0 0	48 0 0
Cylinders	1 „	106 0 0	103 0 0	100 0 0
High pressure pistons	2	7 0 0	6 10 0	6 0 0
Low pressure pistons	2	11 0 0	10 10 0	10 0 0
Piston, rods, 4 high and 2 low pressure ...	6	17 0 0	16 10 0	16 0 0
Valve gear	1 set	68 0 0	67 0 0	66 0 0
Intermediate draw gear	1 „	13 10 0	13 0 0	12 10 0
Draw gear for front of engine	1 „	7 10 0	7 5 0	7 0 0
„ „ „ back of tender	1 „	7 10 0	7 5 0	7 0 0
Buffers	4	17 0 0	16 10 0	16 0 0
Injectors	2	37 0 0	36 10 0	36 0 0
Clack boxes	2	11 0 0	10 15 0	10 10 0
Pressure gauges	6	20 10 0	20 5 0	20 0 0
Spiral safety valve springs	2	1 0 0	1 0 0	1 0 0
Boiler tubes and ferrules	2 sets	460 0 0	455 0 0	450 0 0
Fire bars	10 sets	55 0 0	50 0 0	45 0 0
Gauge glasses and India-rubber rings	5 and 10 gross of each.	11 0 0	10 10 0	10 0 0
Spectacle glasses	10	3 10 0	3 5 0	3 0 0
Lamps	3 sets	21 0 0	20 10 0	20 0 0
Steam brake gear	1 set	58 0 0	55 0 0	52 0 0
Boiler.				
Boiler barrel plates	1 set	111 0 0	108 0 0	105 0 0
Front tube plate	1	16 10 0	15 15 0	15 0 0
Copper tube plates	2	78 0 0	76 10 0	75 0 0
Copper tube and side plate ...	1	75 0 0	73 10 0	72 0 0
Copper back plate	1	21 0 0	20 10 0	20 0 0
Copper rod $1\frac{1}{2}''$ diameter	400 feet	54 0 0	53 0 0	52 0 0
Roof stays	100	16 0 0	15 10 0	15 0 0
		2,2 3 0 0	...	2,111 10 0

Appendix A.—concld.

Description of Stores.	Quantity.	Rate each delivered F. O. B. in the Port of London.	Port of Liverpool or Birkenhead.	Port of Glasgow.
		£ s. d.	£ s. d.	£ s. d.
Brought forward ...		2,213 0 0		2,111 10 0
Tender.				
Wheels and axles	1 set	135 0 0	130 0 0	125 0 0
Tyres	1 ,,	41 10 0	39 10 0	37 10 0
Axles	4	35 0 0	33 10 0	32 0 0
Axle boxes with brasses, complete	1 set	42 0 0	41 0 0	40 0 0
Bearing springs	2 sets	66 0 0	64 0 0	62 0 0
Buffers	4	17 0 0	16 10 0	16 0 0
Steam brake gear	1 set	70 0 0	67 10 0	65 0 0
Tender tank, and well plates	1 ,,	90 0 0	80 0 0	70 0 0
		2 709 10 0	...	2,559 0 0

Appendix B.

Copy of Packing Account, dated 26th April 1886, of S. S. " Clan Macgregor *" showing the measurement and weight of packages containing parts of heavy L class Engine, with spare parts (5′-6″ gauge), Makers—Messrs. Neilson and Co., Glasgow.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
6 Pieces	Each consisting of 1 locomotive boiler and frame, boiler with tubes complete, dome seat with bolts and nuts, regulator long rod, 2 clack box seats with studs and nuts, 1 mud collector seat with studs and nuts, steam blower cock seat studs and nuts, 4 sand box seat studs and nuts, fire-box with safety valve seat, studs and nuts, 6 fire-bar carrier brackets, 8 brick arch carrier studs, 8 asphan carrier studs with cotters, 12 wash out plug seat studs and nuts, 2 scum cock seat studs and nuts, regulator stuffing box studs and nuts, 4 glass gauge cock seat studs and nuts, 1 mud door, 12 handrail bracket studs and nuts, 2 sand-box handle studs and nuts, 2 flame plate studs, 14 clothing studs, 1 fire door frame and protection plate, smoke box with door and crossbar, cylinder steam and exhaust pipes, 2 lubricator pipe covers, bolts and nuts, bogie centre covering plate, 5 mud plugs, 1 blower pipe, frame with hornblocks and clips, 2 cylinders with front and hind covers, 2 front clothing covers, 2 top clothing covers, 2 steam chest covers with studs and nuts, 2 valve spindle guides with oil cups, 2 compensating beams and carriers, 2 beam pins and 4 spring link pins, 8 spring hanger carriers and pins, 2 reversing shaft carriers, 4 brake block hanger carriers with cotters and ferrules, 2 slide bar brackets, cast iron platform with brake cylinder and cover, 2 platforms, 2 slide bar covering plates, 2 front fall plates with handles, front buffer plate with buffer guide, hind buffer plate with 8 fall plate screws, 2 expansion clips with bolts and nuts, 1 fire-box steadying stay with studs and nuts	25 9 9 6 9 1	... ...	20 17 2 0
6 ,,	Each consisting of 1 bogie frame with centre and pin, beams and springs	7 9 5 2 2 4	... ...	1 18 0 0
6 ,,	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 3 3 0 3 0	... ...	1 1 0 0
6 ,,	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 3 3 0 3 0	... ...	1 1 0 0
6 ,,	Each consisting of 1 pair of leading wheels on axle, with crank pins, complete	7 2 4 5 4 5	... ...	2 12 2 0
6 ,,	Each consisting of 1 pair of driving wheels on axle, with crank pins and eccentric pulleys, complete ...	8 0 4 5 4 5	... ...	2 16 2 0
6 ,,	Each consisting of 1 pair of trailing wheels on axle, with crank pins, complete	7 2 4 5 4 5	... ...	2 12 2 0
6 ,,	Each consisting of 1 cowcatcher with blow-off pipe guide ...	9 1 3 1 3 8	... ...	0 4 0 0
	Carried over ...	... ...	... ...	33 3 0 0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	33	3	0	0
6 Pieces	Each consisting of 1 ashpan with ash dropper door frame, and 4 carriers for ashpan perforated doors, 1 bracket for brake releasing springs, 2 jet pipe clips and screws	6	1	4	8	1	10	...	...	...	...	0	4	2	0
6 Cases	Each containing 1 head lamp, 2 side lamps, 2 hand lamps, 1 cab roof lamp, 1 motion lamp, 2 gauge lamps, 1 gong with seat, bolts and nuts, 1 oil bottle, 1 oil can, 1 oil feeder, 1 pressure gauge with cock and pipe, 4 cab window glasses, 2 gauge glasses and india-rubber washers, 1 hank of worsted and copper wire, 1 parcel split and taper pins ...	4	5	2	5	2	5	...	...	...	...	0	2	2	0
6 „	Each containing 2 connecting rods complete, 4 coupling rods complete, 2 valve connecting rods and 4 pins, 2 slide bars	8	8	2	5	1	9	...	...	...	...	1	0	0	0
6 „	Each containing 1 reversing shaft with levers and 2 pins, 2 reversing links, 2 reversing dies, 1 reversing handle and spring catch, 1 reversing sector and plate with pin, bolts, and nuts, 4 eccentric straps and rods with pins, 4 lifting links, 2 swing links and 2 pins, 2 swing link carriers, 2 slide valves, 2 slide valve buckles, 2 valve spindles and 8 brass nuts, 2 pistons and rods, 2 cross-heads, 2 pins, 2 cotters, 4 slide bar bolts and nuts, 4 slide bar set screws, 2 glass gauge lampholders, 1 motion lampholder, 2 sand pipe guides, 1 sand box rod guide, 2 steam blower rod guides, 6 boiler handrail pillars, 2 cab handrail pillars with bolts and nuts, 2 cab roof supports with cotters, bolts and nuts, 2 injector feed-cock spindles and wheels, 2 injector overflow cock spindles and handles, 2 injector steam-cock spindles and handles, 1 whistle steam-cock spindle and handle, 1 regulator handle, 2 smoke box door handles and pin, 1 smoke box door handrail and 2 pillars, 16 gland nuts, 1 ashpan jet-cock spindle and handle	6	3	3	6	2	1	...	...	...	...	1	8	0	0
6 „	Each containing 1 cab roof complete, 2 cab roof gusset stays, 1 R. H. cab side with tool box and name-plate, 1 L. H. cab side with name-plate, 2 footsteps and 2 stays, with clips for overflow pipes, bolts and nuts, 1 complete set of bolts and nuts for cab	9	8	5	7	2	2	...	...	...	...	0	18	2	0
6 „	Each containing 5 fire-box clothing sheets, 8 boiler clothing sheets, 2 cylinder clothing sheets, 1 dome cover, 1 set of (3) fire-box beadings, 1 cab roof lamp cover, 1 dome with wood lagging, 11 clothing straps with bolts and nuts, 20 pieces crinoline clothing hoops, 2 expansion clip covers, 1 regulator baffle plate, 2 bogie wheel splashers, 1 parcel clothing screws ...	5	10	5	6	5	3	...	...	...	...	1	4	2	0
	Carried over ...	...	...	...	...	...	...	...	...	...	...	38	1	0	0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	38	1	0	0
6 Cases	Each containing 1 chimney with bolts and nuts complete, 1 spark arrester, 1 head-lamp carrier with studs, 2 side-lamp holders with bolts and nuts, 2 front buffers with wood liners, bolts and nuts, 2 balance blocks with bolts and nuts, 1 set of (58) fire bars, 1 centre and 2 end fire bar carriers, 1 fire door with chain, 1 deflector plate, 1 flame plate, 1 coal shovel, 2 ashpan damper doors and 4 carriers, 2 ashpan perforated doors, 1 ashpan sector with bolts and nuts, 1 ash dropper door in 2 pieces, 1 ash dropper door handle and 5 rods, 1 ash dropper bell crank and carrier ...	6	7	2	11	2	11	...	...	...	...	1	8	3	0
6 „	Each containing 1 sand box with valves and levers, 2 sand box saddle brackets with studs and nuts, 2 ball and socket and unions for engine, 2 injectors with feed and overflow cocks and 1 ashpan jet cock, 2 injector steam cocks, 4 glass gauge cocks, 2 clack boxes with bolts and nuts complete, 1 steam brake cock and handle, 1 scum cock and handle, 1 blow-off cock, 1 steam blower cock and seat, 4 cylinder water cocks and levers, 2 steam chest cocks and levers with pipes and clips, 1 regulator stuffing box and gland with studs and nuts, 1 regulator rod end with nuts and washer, 2 piston glands and 2 collar bushes, 2 valve spindle glands, 2 cylinder lubricators, 2 steam chest lubricators and pipes 4 bogie oil cups, 6 oilboxes and pipes for axle boxes, 1 whistle complete, 6 wash-out plugs and caps, 14 mud plugs, 4 slide bar lines, 2 acorns for cylinder covers, 6 handrail pillar sockets for boiler, 1 steam blower rod guide seat, 1 steam brake valve, 1 pipe coupling, 1 sand box handle sector, 1 exhaust pipe top (extra)	3	5	3	5	3	5	...	...	...	...	0	13	1	0
6 „	Each containing 6 bearing springs with 12 hangers and screws, 4 brake blocks with hangers and pins, 1 brake cylinder piston with rod and gland, 1 brake connecting rod with releasing springs and eye bolts, 1 brake shaft with 2 cotters, 2 brake tie rods with nuts and ferrules, 2 brake adjusting screws and nuts, 1 regulator with valves and short rod, 1 safety valve complete, 1 hind draw bar, 1 front draw bar with volute spring and washer, 1 front draw shackle with hook and links, 1 hind draw pin with cotter, 2 hind draw safety pins with cotters, 1 20-ton traversing screw jack with ratchet and lever	7	5	3	6	2	1	...	...	...	...	1	11	0	0
	Carried over ...	...	...	...	...	...	...	...	...	...	...	41	14	0	0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	41	14	0	0
6 Cases	Each containing 1 set of wood lagging for boiler and cylinders, 2 boiler handrails with 2 pillars and nuts, 1 sand box rod and handle, 1 steam blower rod with lever and handle, 1 reversing rod and 2 pins, 1 fall plate with hinges, 2 handrails with 8 pillars and nuts for tender tank sides, 1 handrail with 2 pillars and nuts for tender tank back end, 2 long brake rods for tender, 2 ashpan rods, 2 ashpan handles, 1 ashpan handle spring box, 1 ashpan intermediate shaft with carrier, 1 cylinder water cock shaft with carriers, bolts and nuts, 1 cylinder water cock handle, 1 long rod and 7 short rods, 1 cylinder water cock rod guide, 1 cylinder water cock rod lever, 1 blow-off cock spindle and handle, 1 blow-off pipe clip, 2 pieces crinoline clothing hoops, 2 feed pipe carriers, 2 feed pipe carrier stays, 4 delivery pipe carriers, 2 injector spindle brackets 2 cowcatcher stays with pins, bolts and nuts, 12 bolts and nuts for cowcatcher to buffer beam, 1 set of pipes consisting of 6 delivery, 4 steam, 2 feed, 2 overflow, 1 blower, 1 scum, 3 steam brake, 2 glass gauge, 2 blow-off, 4 sand, 4 internal steam, and 1 ashpan jet pipe in 3 pieces, 1 union and nuts, 1 set of fire-irons consisting of 1 long shovel, 1 rake, 1 dart, 1 clinker shovel, 1 pricker, 1 tube plug rod, 1 tube brush rod, 1 crowbar	16	11	2	2	2	4	...	...	...	...	0	16	3	0
6 „	Each containing 6 axle boxes with swing links and pins for engine, 6 axle boxes with covers and brasses for tender, 4 axle boxes with covers for engine bogie, 1 bogie centre pivot with bolts and nuts, 1 bogie centre pivot brass washer, 1 complete set of 16 screw keys, 1 large and 1 small monkey wrench, 1 hand, 1 heavy, 1 lead, and 1 copper hammer, 6 files and 3 handles, 6 chisels, 1 cotter punch, 1 large and 1 small pin punch, 1 footplate brush, 1 tube scraper, 1 tube brush, 5 padlocks and keys	6	5	2	11	2	2	...	...	...	...	1	9	2	0
6 „	Each containing (Tender Details) 6 bearing springs, 12 spring hangers and 12 pins, 6 bearing spring pillars, 2 hind buffers complete, 1 hind draw hook with shackle, volute spring, and washer, 2 hind draw chains and hooks, 2 front safety links, 2 front safety pins and cotters, 6 brake blocks and hangers, 6 brake hanger pins, 1 brake shaft, 3 brake tie rods and washers, 2 brake rods and 2 pins, 1 brake screw with rod and handle, 1 brake screw pillar with bolts and nuts, 2 copper feed pipes with bolts and nuts, 2 ball and socket union pipes and feed cocks with bolts and nuts, 2 feed cock spindles and handles with levers and guides, bolts and														
	Carried over ...	...	...	...	...	...	...	...	...	...	...	44	0	1	0

Appendix B.—concld.

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	44	0	1	0
	nuts, 2 feed pipe hangers and 2 stays, bolts and nuts, 2 handrail pillars with tops and nuts, 2 handrail pillar brackets with bolts and nuts, 4 footsteps and 2 stays with bolts and nuts 2 footstep handles, 2 lampholders with bolts and nuts, 2 tool box lids, 1 name plate, 1 water gauge pipe top, 1 set of (6) footboard jointing plates with bolts and nuts	7	11	3	2	2	8	...	...	...	...	1	16	3	0
6 Cases	Each containing 1 cab roof for tender complete, 2 cab sides with bolts and nuts, 1 cab back plate with bolts and nuts, 2 cab roof brackets with bolts and nuts, 4 cab roof pillars with bolts and nuts, 14 footboard carriers, bolts and nuts	9	7	5	3	1	5	...	...	...	...	0	12	0	0
6 Pieces	Each consisting of 1 tender tank with sieve and lid, hind lamp platform, 16 wood pillar brackets, 1 hind and 2 front tool boxes, 4 lifting plates, "feed well" packed in manhole of tank, water gauge pipe packed in hind tool box ...	15	4	9	6	6	6	...	...	...	...	3	17	0	0
6 „	Each consisting of 1 tender frame with hornblocks and clips, 6 brake hanger carriers, 2 brake shaft carriers, 12 spring hanger brackets, 6 spring pillar guides, 1 front intermediate spring with draw pin and cotter, 2 intermediate buffers with shoes, hind buffer plate with draw hook guide, bolts and nuts for tank to frame	15	10	9	6	3	3	...	...	...	...	3	16	2	0
6 „	Each consisting of 1 pair of leading tender wheels on axle, complete ..	8	2	3	10	3	10	...	...	...	...	1	8	3	0
6 „	Each consisting of 1 pair of centre tender wheels on axle, complete ...	8	2	3	10	3	10	...	...	...	...	1	8	3	0
6 „	Each consisting of 1 pair of trailing tender wheels on axle, complete ...	8	2	3	10	3	10	...	...	...	...	1	8	3	0
	Total Gross Weight of 1 heavy L class Engine and Tender							...	...	...	...	58	8	3	0

Appendix C.

Copy of Packing Account dated *of S. S.* "Princess Louise" *showing measurement and weight of packages containing parts of E class engine, (metre gauge): Makers—Vulcan Foundry Co.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
1 Piece	Each consisting of one Locomotive Boiler with 1 set of brass tubes in place, dome seat, bottom part of regulator pipe, regulator rod and small lever, safety valve seating, 2 clack box seats, mud collector 1 cover and all studs, smoke box with door and cross bar, 2 steam pipes, 1 T pipe and main steam pipe in boiler, 1 exhaust pipe in parts and 6 brass mud plugs in tube plate. Fire box with three mud doors in place and 2 carriers for fire bars; studs on fire-box for mountings and cleading sheets, also studs for safety valve pillar, 9 longitudinal stays and 2 copper steam pipes in boiler, 2 expansion stay angle irons. Frame with horn blocks and stays complete, leading and driving spring link carriers and trailing spring with carriers complete, 2 angle irons for reversing shaft brackets; 1 C. Iron footplate, back buffer plate, 2 side bar brackets, 2 platform supports, 2 footstep plates and stays, platforms, front buffer beam, 1 draw box and India rubber washers, 1 pair cylinders and covers cased with wood and iron sheeting ...	18	9	7	0	6	9	22	6	1	0	22	16	3	0
1 „	Each consisting of 1 pair leading wheels on axle with crank pins and journals cased with wood ...	4	6	3	2	3	2	2	13	0	10	2	13	1	6
1 „	Each consisting of 1 pair driving wheels on axle with crank pins and journals cased with wood ...	5	4	3	2	3	2	2	13	1	0	2	13	2	8
1 „	Each consisting of 1 pair trailing wheels on axle with journals cased with wood	3	11	2	3	2	3	1	5	1	13	1	5	2	0
1 Case	Each lined with tin, containing 2 connecting and 2 coupling rods complete, 2 slide bars with 2 liners and bolts, 4 eccentric rods and 2 pins, 4 eccentric sheaves complete and 4 eccentric straps and bolts, 1 pump rod, eccentric sheave with straps and bolts complete, 1 reversing shaft and 2 pins, 1 C. I. balance weight and pin, 2 brackets for reversing shaft complete, 4 lifting links and 2 pins, expansion links, 2 valve rods and 2 pins, 2 valve spindles and 8 brass nuts, 4 small spring pillars, 1 regulator handle, 2 cross heads, and brasses complete, 2 pistons and rods, 2 spindles and 2 handles for injector, 1 whistle rod and 2 brass washers, 1 dart with 2 handles for smoke box door, 4 handrail brackets and 4 sockets, 2 small brackets and 2 nuts, 2 hand rail pillars and 2 nuts, 1 cylinder cock shaft, 3 levers and 3 pins, 2 short and 2 long links, 1 spindle and 2 levers, 1 safety valve pillar with spiral spring, valves, lever and links complete;														
	Carred over ...	...	...	...	...	...	...	...	...	...	...	29	9	0	14

Appendix C.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...	...	...	...	...	...	...	...	...	...	29	9	0	14
	1 small carrier for blower pipe, 1 small neck regulator pipe, spring and bolts and brass valve, 1 short stroke pump ram, air vessel, brass gland and bolts complete, 1 rod for regulator valve and 2 pins ...	7	1	2	10	2	1½	3	7	1	16	3	17	0	1
1 Case	Each containing 1 ashpan with doors complete, and 1 small lever, 26 bolts and nuts for dome flange, 1 dome and stud, 21 W. iron fire bars, 4 W. iron splashers and bolts, 1 fire door complete, 1 central buffer and draw bar, chain and pin, 2 leading and 2 driving springs, 8 spring links, 1 draw pin and 2 safety pins, 1 rod for ash-pan, 2 life guards and 4 bolts, 2 footsteps and 8 bolts, 1 baffle plate and 2 set screws, 8 set screws and washers for cleading sheets ...	5	6	3	1½	2	4	2	10	1	21	2	19	1	4
1 „	Each lined with tin containing 2 brass slide valves, 2 buckles and 4 springs, 2 valve rod guides, 2 set screws and 8 bolts, 2 brass clack boxes with 12 bolts, 2 brass ball and socket pins, 2 brackets and bolts, 1 stuffing box and gland, 2 studs and centre spindles for regulator rod, 1 Friedman's injector, 2 small cocks, and 2 brackets and bolts, 2 piston rod glands and bushes, 4 valve spindle glands and 4 bushes, 2 sand-box valves, 2 flanges, 2 bell crank levers and 2 pins, 4 brass piston rings, 2 Roscoe's lubricators, 2 Furness lubricators, 1 whistle, nut and lever, 2 brass mud plugs and seats, 2 glass gauge cocks, 2 seats and 2 coupling nuts, 2 water cocks and 2 seats, 4 cylinders and 2 steam chest cocks and 6 levers and pins, 4 brass syphons and 4 small copper pipes and 2 brackets for valve spindles and piston rods, 6 brass mud plugs, 1 brass elbow and nut for jet pipe, 1 mud cock, 1 small bracket, 1 lever and handle complete, 2 straight pipes for inside of dome, 3 W. iron clips and 6 bolts for mud pipe pump and injector delivery pipe, 3 copper lubricating pipes and 6 brass nuts, 2 C. iron shells for protecting small lubricating pipes, 1 steam cock for injector and spindle, 1 blower cock and spindle	4	0	2	1	1	10½	0	15	2	25	1	1	1	14
1 „	Each containing 1 dome, 3 parts of mounting and 2 copper pipes for back of fire-box, 1 sheet for back plate of fire-box, 8 sheets for barrel and fire-box, 3 belts for barrel and fire-box belts with 5 bolts, 1 set of crinoline rings, 4 straight pieces, 2 bent strips and 2 angle pieces for corners of fire-box, 1 cylinder mounting for safety valve seat ...	3	5	3	5	4	5	0	14	1	3	1	3	1	9
1 „	Each containing wood lagging for boiler, fire-box and dome barrel, 2 long handrails, 1 rod for cylinder cock gear, 2 C. Iron sand-boxes														
	Carried over ...	...	...	...	...	...	...	...	...	...	...	38	10	0	14

Appendix C.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...	...	...	...	...	..	...	...	...	...	38	10	0	14
	and bolts, with 2 brass name-plates on, 1 blower pipe with 2 brass nuts, 1 long tube cleaner, 1 pet cock rod, 3 sand box rods, 1 cylinder cock rod, 1 pipe for mud cock, 2 injector steam pipes with 2 brass nuts, 3 suction and delivery pipes and 4 bolts, 1 funnel and pipe, 1 pipe for glass gauge cock, 2 pump suction pipes and one brass nut, 1 pump delivery pipe, pet cock, small pipe and lever, 2 sand pipes 4 brackets and 6 bolts, 1 long reversing rod and 2 pins, 2 long reversing links for tender brake ...	14	7½	1	11	1	10	1	3	0	26	1	14	0	17
1 Case	Each containing cab roof lined with wood, 2 cab fish plates, 2 sides of cab and one front plate, 4, ⅜" bolts, 22, ½" bolts and 6, ⅝" bolts for bolting cab to platform, 75, ¾" bolts for sides and roof of cab, 2 cab doors, 1 small case containing 4 brass rings for eye glasses, 2 brass knobs and 2 handles, 4 small brass handles, and 4 swivels for eye-glass frames, 1 small case containing 4 eye-glasses, 1 smoke box mounting and 7 pieces of teak for covering engine footplate	7	11	7	7	1	11	1	12	1	21	2	12	3	26
1 „	Each containing 1 chimney and bolts, 1 plate and 4 bolts for carrying lamp, 2 leading, 2 driving, and 2 trailing axle boxes complete, 2 sliding covers for trailing axle boxes, 4 thin W. Iron covers for axle boxes, 1 ten-ton traversing screw-jack and bottom handle, 1 longitudinal strip and all screws for crinoline belts, 1 sector plate and quadrant, 3 small levers and 2 bolts complete, 1 reversing sector plate and quadrant, lever and bolts complete, 1 fall plate, 2 hinges and 4 set screws. Tools:—1 rake, 1 dart, 1 pricker, 1 clinker shovel, 1 long and 1 short shovel, 1 tube plugging iron, 1 long pinch bar, 6 single spanners, 1⅛", 1", 1¼", ¾", ½", and ⅜"ths 4 double spanners, 1¼" and 1⅛," 1" and ⅞," ¾" and ⅝," ½" and ⅜", 2 flat and 1 cross cut chisel, 1 cotter drift, and 2 pin punches, 1 copper and 1 tin hammer, 1 hand and 1 quarter hammer, 2 monkey wrenches, 10 and 14 inches 2 flat files, 14 and 15 inches bastard, 1-14 inch half round bastard and 1 round bastard, 1 hand brush, 1 half gallon oil can, 1 long oil feeder and 1 pint oil can ...	7	6	3	0¾	2	3½	1	18	3	1	2	9	0	20
1 „	Each lined with tin, containing 1 head lamp and brackets and bolts, 2 side lamps with red lights, 2 brackets and 4 bolts, 2 hand lamps, 2 gauge lamps and 1 small bracket; 1 small case containing 1 pressure gauge, 1 pipe and 2 nuts, 14 spare gauge glasses, and 28 india rubber rings ...	3	7½	3	1½	2	3	0	2	3	16	0	10	0	23
	Carried over ...	...	...	...	...	...	...	...	...	...	...	45	16	2	16

Appendix C.—*concld.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft	In.	Tons.	Cwt.	Qrs.	lbs.	Ft.	In.	Cwt.	Qrs. lbs.
	Brought forward ...	.....						.....				45	16	2	16
1 Piece	Each consisting of 1 tender frame and tank, 2 tool boxes in front and 2 tool boxes at back, with brass name plate I. S. R. 2 buffer boxes, 1 water feed tank, 25 stanchion brackets on sides and back of tank, 6 horn stays, 2 foot-step stays, 12 spring shoes, 12 horn blocks cased with wood, 1 draw spring and pin, 2 brackets for brake shaft, 1 lamp carrier at back of tank, tank crated with wood ...	16	4	7	0	5	8	11	3	1	13	11	13	1	0
3 Pieces	Each consisting of 1 pair tender wheels on axle, journals being cased with wood ...	5	5	2	3	2	3	3	17	1	12	3	17	3	4
1 case	Each containing 1 brake pillar with 6 bolts, 6 brake hangers and blocks, 6 top pins and 12 collars, 1 brake screw and handle, 3 brake links and pins, 3 cross shafts with all collars and pins, (2 long brake links in engine case No. 9), 1 brake shaft, 2 buffers plungers and shoes, 2 safety links and 2 pins, 1 draw bar, 2 foot-steps and 8 bolts, and 2 stays and 4 bolts, 3 plates for draw box, and 16 bolts, 1 guide for draw bar and 2 bolts, 1 central buffer, 1 draw bar, pin, cotter and chain, 2 plates, 1 nut and 1 volute spring complete, 2 brass feed cocks, and 8 bolts, 2 brass elbows, 2 brass ball and socket pipes, 2 clips, chains and bolts, 6 tender springs, 12 steel spring shoes, 6 axle boxes, with brasses complete, 2 sliding covers for middle axle boxes, 2 handrail pillars, 2 brackets and 4 bolts, 2 spindles, 2 handles and 2 small guides for feed cocks, 1 strainer for tank and 1 lid, 6 carriers and tin bolts for tender platform, and 2 padlocks with different keys	7	8	2	6	2	3	3	1	0	17	3	11	0	13
	Total Gross weight of one E class Engine and Tender ...	.....						.....				64	18	3	5

Appendix D.

Copy of Packing Account, dated 25th June 1887, of the S. S. "Amarapoora" shewing measurement and weight of packages containing parts of O class Engines (Metre Gauge): Makers—Messrs. Neilson and Co., Glasgow.

Description and number of packages.	Description of Stores, showing Contentsof Packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
5 Pieces	Each consisting of 1 Locomotive boiler and frame, boiler with tubes regulator pipe and valves, with short rod and pins, regulator long rod and carrier, internal steam pipe and clips, 2 internal steam pipes and couplings for injectors, 1 ditto for steam blower, dome and top with bolts and nuts, 2 clack box seatings, 10 studs and nuts, 1 mud collector cock seating, studs and nuts, 2 clothings studs in dome, 2 handrail pillar brackets, studs and nuts, 1 manhole cover, bolts and nuts, fire-box with vertical and horizontal stays and nuts, 1 safety valve seating, studs and nuts, 8 injector steam cock studs and nuts, 2 steam blower cock studs and nuts, 4 studs for injector, steam blower and whistle spindle guides, 12 studs and nuts for wash-out plug seats, 2 expansion brackets, 13 clothing studs, 4 clothing brackets with 8 studs and nuts, 4 mud plug seatings, 2 mud doors, 8 glass gauge cock studs and nuts, 1 glass gauge lampholder seat, studs and nuts, 4 blow off cock studs and nuts, 4 regulator stuffing box studs and nuts, 1 steam brake cock seating, studs and nuts, 1 fire door frame, 1 catch and 6 studs and nuts, 2 flame plate studs and pins, 2 scum cock studs and nuts, 2 centre fire bar carrier brackets, 4 studs and nuts, front and hind fire bar carrier studs, 2 fusible plugs, 6 studs for brick arch, 8 studs and 8 cotters for ashpan to bottom ring, smoke box with door, hinges and pin, and cross bar with carriers, 2 cylinder steam pipes, 1 steam T. pipe, bolts and nuts, exhaust steam pipe and top, studs and nuts, 1 steam blower pipe and 2 coupling nuts, 2 lubricator pipe covers, bolts and nuts, 1 stay for blast pipe, 5 mud plugs, 2 angle irons for smoke box bottom, 12 set screws. Frame, with 2 cylinders front and hind covers, 2 steam chest covers, studs and nuts, 2 valve spindle pocket glands, bogie centre casting, bolts and nuts, and bogie centre pin with nut and washer, 1 front buffer beam, 1 buffer box and guide with volute spring and washers, bolts and nuts, 4 axle box guides and 4 clips with 8 studs and nuts, 2 compensating lever brackets, 12 bolts and nuts, 2 pins and washers, 4 spring link brackets, 2 expansion brackets and clips, bolts and nuts, 8 brackets and set screws for splashers, 2 footstep plates, 4 rocking shaft carriers, bolts and nuts, 2 reversing shaft carriers, bolts and nuts, 2 slide bar brackets 4 piston			
	Carried over ..	.....	.....	.....

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
	Brought over ...	.....	.....	.....
	rod gland studs, 8 fall plate screws, 2 bushes and 4 bolts and nuts for cylinder water cock shaft, 1 motion lampholder, 4 brake block hanger bracket, 3 cross stretchers, 2 platform plates and cast iron foot plate	22 5 7 7 8 9	.....	11 2 0 0
5 Pieces	Each consisting of 1 pair of bogie wheels on axle complete ...	3 10 2 7 2 7	.....	0 10 0 0
5 „	Each consisting of 1 pair of bogie wheels on axle complete ...	3 10 2 7 2 7	.....	0 10 0 0
5 „	Each consisting of 1 bogie frame, with 8 axle box guides, 4 horn clips, 8 studs and nuts, 2 spring beams, 2 springs, 4 spring links and pins, 2 tierods, 1 bogie centre, 1 centre slide, 2 carriers and steel check springs	5 11 2 11 1 10	.....	0 17 2 0
5 „	Each consisting of 1 pair driving wheels on axle, with 4 eccentric pulleys, 2 crank arms, 2 crank pins and nuts, and balance weight complete	7 0 4 7 4 7	.....	1 14 0 0
5 „	Each consisting of 1 pair trailing wheels on axle, with 2 crank arms, 2 crank pins and nuts, and balance weights complete	7 0 4 7 4 7	.....	1 11 1 0
5 „	Each consisting of 1 cowcatcher ...	7 0 2 6 2 6	.....	0 2 2 0
5 „	Each consisting of 1 ashpan ...	5 0 2 9 1 11	.....	0 3 1 0
5 Cases	Each containing 2 connecting rods with 4 pairs brasses, 2 large cotters, with split cotters, 4 oil cup covers, 4 sets screws, 2 check blocks, and 2 bolts and washers, 2 coupling rods with 4 brass bushes and 4 oil cup covers, 4 eccentric straps and 4 rods with pins complete, 1 reversing shaft with lifting link pin and washer, 2 slide valves, 2 valve spindles and buckles, 2 crossheads and 2 cotters, 2 valve spindle gland stuffing boxes and 4 studs, 2 valve connecting rods and 2 pins, 2 pistons and rods with packing rings, brass nuts and split cotters, 2 piston crossheads with 4 brass slide block liners, 12 bolts and 24 nuts, 2 oil cup covers, 4 studs and nuts, 2 piston crosshead pins with nuts and washers, 2 piston crosshead cotters with split cotters, 2 expansion links with 2 brackets, 2 lifting link studs and washers, 2 oil cups and 2 dies, 2 lifting links, 2 rocking shafts and 4 pins, 2 slide bars and 4 liners, 6 slide bar bolts and nuts, 1 regulator handle, 1 regulator handle socket with nut and washer,			
	Carried over ...	.....	.....	16 10 2 0

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						.....				16	10	2	0
	1 smoke box handrail and 2 studs with nuts and washers, 2 smoke box door handles and pin, 2 injector steam cock spindles, 2 handles, 2 guides, 1 whistle cock spindle, 1 handle and 1 guide, 1 blower cock spindle, 1 handle and 1 guide, 1 mud collector cock handle with guide, bolts and nuts, 2 injector feed cock spindles and handles, 2 injector overflow cock spindles and handles, 2 hand rail pillars with knobs and nuts for cab, 1 set of (16) piston and valve spindle gland nuts, 1 ashpan jet cock spindle and handle, 1 guide	8	1	3	1	2	1	.....				1	6	1	0
5 Cases	Each containing 10 clothing plates for boiler and fire box, 1 fire box face plate and one piece wood lagging for ditto, 1 dome clothing cover and 1 piece wood lagging for dome, 1 set of (3) fire box beadings, 2 cylinder clothing plates, 1 set of (8) clothing straps, 1 set of (23) crinoline hoops and bands, 1 cab roof lamp cover, 1 parcel screws and pins for boiler and cylinder clothing, and 1 stud and pin for dome top	4	3	4	3	5	2	.....				0	11	2	0
5 „	Each containing 1 right hand cab side with tool box and lid, hasp and eye bolt, hinges, bolts, and nuts, 13 bolts and nuts to foot plate, 5 bolts and nuts to roof, 12 bolts and nuts to front, 1 left hand cab side, with 12 bolts and nuts to front, 13 bolts and nuts to foot plate, and 5 bolts and nuts to roof, 1 cab front with two doors and hinges, 2 handles, 4 brass window frames, 6 bolts and nuts to footplate, 7 bolts and nuts to roof, 1 cab with 14 bolts and nuts for front to roof, 2 cab stays, bolts and nuts, 1 teak wood platform for engineman's footplate, 1 small box containing 4 spectacle glasses, 2 gauge glasses and washers, 1 pressure gauge and pipe, 1 hank of worsted and copper wire for syphons	8	0	6	7	2	1	.....				0	17	0	0
5 „	Each containing 1 chimney with bolts and nuts, 1 spark arrestor, 2 sand boxes with 2 lids, 2 chains, 2 valves, 2 bushes, 2 levers, 3 pins, 4 bolts and nuts, 1 head lamp carrier with 4 studs and 4 screws, 2 side lamp holders with 4 bolts and nuts, 1 central buffer with pin, nuts and washers, 1 draw hook, 1 draw pin, 2 safety pins, 1 draw bar, 1 reversing screw bracket with hand wheel and handles, 1 key, 1 screw, 1 die, 1 stud, 2 nuts, 1 index plate and 2 screws, 1 indicator, 1 mall-iron carrier for reversing screw bracket, with 8 bolts and nuts, 1 safety valve seat, with valves, lever, and spring complete, 1 fire door and chain, 1 fire door defector plate, 1 fire door frame-plate, 1 ashpan perforated door, 1 ashpan damper door, with lever and carriers, 2 ash dropper doors, with														
	Carried over ...	.....						.....				19	5	1	0

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						.....				19	5	1	0
	gearing complete, 1 sector and stud, with 2 washers and 3 bolts and nuts for cylinder, sand and damper rod handles, 1 cylinder water cock handle, 1 sand rod handle, 1 ashpan rod and handle with pins, 2 cowcatcher stays with 8 bolts and nuts, 13 bolts and nuts for cowcatcher to buffer beam, 1 10-ton traversing screw jack with ratchet and lever, 1 set of (16 sizes) screw keys, 1 large and 1 small monkey wrench (7 in. and 14 in.), 1 copper, 1 lead, 1 quarter and 1 hand hammer, 2 flat, 2 round, and 2 cross-cut chisels, 2 pin punches (⅛ in. and ¼ in.), 1 cotter punch, 1 hand brush, 6 files and 3 handles, 1 tube scraper, 1 tube brush, 1 crowbar, 1 pricker, 1 dart, 1 rake, 1 tube brush rod, 1 tube plug holder, 1 long shovel, 1 short, shovel, 5 padlocks and keys, 1 slice, 2 foot-steps, bolts and nuts ...	7	1	3	5	2	5	.....				1	1	0	0
5 Cases	Each containing 1 steam brake cylinder, with piston and brass packing, 1 rod, 1 crosshead and pin, 1 relief valve, 1 gland, 2 studs and 4 nuts, 4 brake blocks with hangers, 4 springs, 4 pins, and 8 set screws, 4 pins, and ferrules, 2 brake tie rods, 1 shackle and 2 pins, 2 brake coupling rods, 1 shackle, 3 pins, 2 eye bolts and 2 springs, 4 engine bearing springs and 8 pins, 8 spring links and 8 pins, 2 compensating beams, 1 set of (22) single fire bars, 4 side fire bars, 1 centre fire bar carrier, 1 front and 1 hind carrier, 2 reversing shaft balance weights with 2 bolts and nuts ...	6	5	2	5	2	1	.....				1	3	1	0
5 „	Each containing 2 bogie, 2 driving, and 2 trailing wheel splashers, with bolts and nuts, 2 driving crank splashers, 2 steam chest cover casings, 2 injectors, with feed and overflowcocks and ashpan jet cock, 8 bolts for delivery pipes, 8 studs for injector steam pipes, and 4 bolts for suction pipes, 2 injector feed cock hangers and two stays, 8 bolts and nuts, 2 ball and socket pipes, with hangers for engine, 2 clack boxes, with 8 bolts and nuts, 2 blow-off cocks, 1 mud collector cock, 1 steam blower cock, 2 injector steam cocks, 1 scum cock and handle, 1 steam brake cock with handle, sector and elbow bracket, 4 glass gauge cocks and seatings, 1 whistle with cock and seating, 2 piston glands and 2 bushes in 4 pieces, 2 valve spindle glands and 2 bushes, 1 union for outside blower pipe, 14 mud plugs, 6 wash-out plugs and nuts, 2 Roscoe's lubricators for steam pipes, 2 Furness' lubricators for cylinders, 1 regulator stuffing box and gland with studs and nuts, 6 cylinder water cocks with levers and pins, 2 piston rod oil cups, 2														
	Carried over ...	.....						.....				21	9	2	0

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...		...		...		...				21	9	2	0
	valve spindle oil cups, 2 bogie centre oil cups, 1 pressure gauge cock, 1 glass gauge lampholder, 1 blast pipe top (spare), 1 blower pipe guide, 2 injector feed and over-flow spindle guides, bolts and nuts, 1 cylinder water cock rod guide, bolts and nuts, 2 mud discharge pipe guides	6	8	2	7	1	5	...	...	...	...	0	11	0	0
5 Cases	Each containing 1 set of wood lagging for boiler, fire box and cylinders 2 injector delivery pipes in 6 pieces, 2 coupling nuts and 8 bolts and nuts, 2 injector steam pipes in 6 pieces and 6 coupling nuts, 2 injector suction pipes, 1 outside blower pipe and 2 coupling nuts, 2 steam brake pipes and 2 coupling nuts, 1 brake exhaust pipe and elbow, 1 scum pipe, 1 mud discharge pipe and coupling nut, 2 glass gauge drip pipes, 2 sand pipes and 4 guides, 4 cylinder lubricator pipes, couplings and nuts, 2 steam chest condensed water pipes, couplings and nuts, 1 ashpan jet pipe in 4 pieces, with couplings and nuts, 1 reversing rod with pin and washer, 2 sand box rods, 2 boiler handrails with 4 studs and 2 nuts for smoke box, 4 tender handrail with eight studs and nuts, 1 cylinder water cock shaft with 3 levers and three pins, 5 cylinder water cock rods, 1 lever and 2 pins, 1 face plate with hinges ...	14	10	2	1	2	0	...	...	...	...	0	12	0	0
5 ,,	Each containing 4 engine axle boxes with brass bushes, 4 spring hanger pins, 8 pins for keeps and 4 covers, 6 tender axle boxes with brasses and iron liners, lids and guard plates, brass plugs and oilhole covers, 6 leather washers, 2 sliding tops for centre axle boxes, 4 bogie axle boxes with covers complete, 2 ashpan damper air doors with two lids, 6 screws, 6 bolts and nuts and 2 hooks ...	4	2	2	8	2	5	...	...	...	...	0	14	1	0
5 ,,	Each containing 1 head lamp, 2 side lamps, 2 gauge lamps, 1 motion lamp, 2 handlamps, 1 cab roof lamp, 1 oil bottle, 1 oil can, 1 oil feeder ...	4	3	2	5	2	0	...	...	...	...	0	3	2	0
5 ,,	Each containing 1 tender cab roof complete, 2 side railings with pillars and coping for tank, 1 hind railing with pillars and coping for tank, 2 cab handrail pillars, 2 brackets and 4 bolts and nuts for tank ...	10	6	5	10	2	0	...	...	...	...	0	16	1	0
5 ,,	Each containing 6 tender bearing springs, 2 spring pillars, 4 spring links, 8 nuts and 4 washers for centre bearing springs, 6 brake blocks and hangers and 6 pins, 6 hanger pins and ferrules, 1 brake screw and handle, 1 brake screw rod and nut with pin, 1 brake screw pillar with cap and bolts and nuts														
	Carried over ...	...		...		...		...				24	6	2	0

Appendix D.—*concld.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...		...		...		...				24	6	2	0
	to footplate, 4 brake rods and 2 pins, 3 brake tie rods and washers, 1 central buffer with pin, nuts and washers, 1 draw hook, 2 safety pins, 2 safety links, 1 buffer guide, bolts and nuts, 2 life guards, bolts and nuts, 2 foot steps and 16 bolts and nuts, 9 foot board hangers and 38 bolts and nuts, 2 corner binding plates for footboards, 2 feed valve spindles and handles, 2 copper feed pipes, 2 ball and socket feed pipes, and cocks with carrier, bolts and nuts, 1 class O plate, 2 tool box lids with hinges and hasps, 1 gong with wood seat and 3 bolts and nuts to tank, 1 gong cord guide ...	7	9	2	3	2	1	...	...	...	...	0	19	2	0
5 Pieces	Each consisting of 1 tender tank and frame, tank with front and hind tool boxes, lid hasp, eye bolt, and hinges, 14 pillar brackets and 28 bolts and nuts, 10 sockets for railings on tank, 2 shields for water valve spindles, 1 sieve and filling door, 1 bunker door and catch, 2 head lamp platforms, 2 side lamp holders, and 4 lifting plates.														
	Frame with axle box guides and clips, studs and nuts, 12 spring link brackets, 8 spring links and pins (front and hind), 4 tank supports, and 8 bolts and nuts, 1 brake shaft and 2 carriers with bolts and nuts, 1 intermediate buffing spring with draw pin, 2 intermediate buffers with shoes and guides, 2 cisterns with bolts and nuts, 1 water gauge pipe and top, 1 hind buffer plate with buffer box, volute spring and washers ...	13	8	7	5	6	4	...	...	...	...	4	4	0	0
5 ,,	Each consisting of 1 pair of leading tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
5 ,,	Each consisting of 1 pair of centre tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
5 ,,	Each consisting of 1 pair of trailing tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
	Total gross weight of 10 class engine and tender complete ...	...	...	...	...	...	...	...	...	...	...	31	0	3	0

Appendix E.

Copy of Packing Account, dated 6th August 1888 of the S. S. " Amarapoora *" showing measurement and weight of packages containing parts of F Class Engine (Metre Gauge) : Makers—Messrs. Neilson & Co., Glasgow.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
5 Pieces	Each consisting of 1 locomotive boiler and frame, boiler with tubes complete, internal steam pipe and bottom part of regulator pipe, regulator long rod, dome seating with bolts and nuts, mud collector seat and cover, studs and nuts, 2 clack box seats, studs and nuts, 4 studs and nuts for boiler hand-rail pillar seats, fire-box with ashpan attached, 6 studs, and nuts for steam brake valve seat, fire door frame, safety valve seat, studs and nuts, 2 studs and nuts for glass gauge lamp-holder seat, 4 clothing brackets, 12 clothing studs, 2 studs and pins for flame plate, 2 fusible plugs, 2 mud doors, 12 studs and nuts for wash-out plug seats, 6 fire bar carrier brackets, 2 back damper doors for ashpan, 4 studs and nuts for blow-off cocks, smoke box with door and crossbar, 4 mud plugs, 1 steam T pipe, 2 cylinder steam pipes, 2 exhaust steam pipes and top, 2 lubricator pipe covers, and bottom covering plate. Frame with hornblocks and clips, 2 cylinders with front and hind covers, 2 steam chest covers, 2 valve spindle stuffing boxes with collar bushes, 2 slide bar brackets, 12 spring hanger brackets, 6 spring pillar guides, 2 reversing shaft carriers, 4 brake block hanger carriers, 3 cross stretchers, 1 front buffer beam, 1 "Timmis" spring and steel case, foot plate with draw-box and two buffing plates, 8 fall plate screws, 2 expansion clips with bolts and nuts, 1 back covering plate for fire box with screws, 1 reversing handle bracket 2 platforms with 4 carriers and 2 foot-step plates, 2 doors with handles for cylinder steam chests, and 2 steam chest pipe clips ...	22 3 7 3 7 2	...	11 0 0 0
5 Pieces.	Each consisting of 1 pair of leading wheels on axle, with outside driving cranks complete	7 0 3 9 3 9	...	1 2 1 0
5 „	Each consisting 1 pair of driving wheels on axle, with outside cranks and eccentric pulleys complete	7 0 3 9 3 9	...	1 6 0 0
5 „	Each consisting of 1 pair of trailing wheels on axle, with outside driving cranks complete	6 6 3 9 3 9	...	1 2 0 0
5 „	Each consisting of one cowcatcher ...	7 0 2 3 2 3	...	0 2 0 0
	Carried over ...	...	...	14 12 1 0

Appendix E.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs	Tons. Cwt. Qrs. lbs.
	Brought forward ...	... ...	... ...	14 12 1 0
5 Cases	Each containing 1 reversing shaft and 3 pins, 2 connecting rods complete, 4 coupling rods complete, 4 eccentric straps and rods and 2 pins, 2 valve connecting rods and 4 pins, 2 slide valves, 2 valve spindles and buckles with crossheads and cotters, 2 pistons and rods with rings and nuts complete, 2 piston cross heads with brass liners, pins and cotters, 4 swing links with brass bushes, 4 lifting links, 2 reversing links and 2 dies, 1 reversing handle with pin, 1 regulator handle, 1 regulator rod end with nut and washer, 4 motion pins, 2 smoke box door handles and pin, 2 slide bars with 4 bolts and nuts, 2 handrail pillars with tops and nuts, 2 injector feed cock spindles and handles, 2 injector overflow cock spindles and handles, 2 injector steam cock spindles and handles with guides, 1 steam blower cock spindle and handle with guide, 1 steam whistle cock spindle and handle with guide, 1 steam blower pipe guide, 1 glass gauge lampholder with seat, 4 boiler handrail pillars, 2 with seats and 2 with nuts, 1 smoke box door handrail with 2 studs and nuts, 16 gland nuts	6 9 2 10 2 5	...	1 4 2 0
5 „	Each containing 1 cab roof for engine complete, 1 set of (40 pieces) teak wood lagging for boiler, 1 set of (16 pieces) teak wood lagging for cylinders, 1 wood seat for gong, 3 teak wood tool box lids ...	8 0 6 3 2 0	...	0 11 1 0
5 „	Each containing 1 right hand cab side with tool box and name plate, 1 left hand cab side with name plate, 2 cab roof gusset stays, 1 complete set of bolts and nuts for cab, 1 small box containing 4 cab front window glasses, 1 pressure gauge with cock and pipe, 2 gauge glasses with india rubber washers, 1 hank of worsted, 1 hank of copper wire, 1 parcel split and taper pins ...	8 2 6 1 1 10	...	0 12 0 0
5 „	Each containing 9 boiler and fire box clothing sheets, 6 clothing straps, bolts and nuts, 1 set of (18 pieces) boiler crinoline hoops, 1 dome, 1 dome clothing cover, 2 cylinder clothing sheets, 3 pieces fire box beading, 1 parcel clothing screws, 1 regulator baffle plate	4 8 4 8 5 7	...	0 14 0 0
5 „	Each containing 1 chimney with bolts complete, 1 spark arrestor, 2 sand boxes with valves, levers and number plates (N and C.), 1 duplex safety valve complete, 1 reversing sector and plate, bolts and nuts, 1 regulator pipe and valve with short rod and 2 pins, 1 cylinder water cock and sand box sector and pin, bolts and nuts, 1 cylinder water cock handle, 1 sand box handle, 1 ashpan handle, 1 mud collector cock handle, 1 spindle and carrier, 2 blow-off cock spindles and handles, 1 mud collector handle guide, 1 head lamp platform with 4 studs and			
	Carried over ...	... ...	... ...	17 14 0 0

Appendix E.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...		..		...		...	...	...	...	17	14	0	0
	nuts, 2 side lampholders with bolts and nuts, 1 motion lampholder and bracket, bolts and nuts, 1 cylinder water cock rod guide, 1 ashpan door with lever and 2 carriers, 1 ashpan perforated door, 1 fire door and chain, 1 central buffer with pin and nut, 1 draw hook, 1 draw pin, 2 safety pins, 1 flame plate, 1 defector plate, 2 foot steps with bolts and nuts, 2 cowcatcher stays with bolts and nuts, 4 bolts and nuts for cowcatcher to buffer beam, 2 injector spindle brackets, 2 injector brackets and 2 stays with bolts and nuts, 2 ball and socket union pipe carriers with bolts and nuts, 1 mud collector pipe clip and 2 wood screws, 4 delivery pipe clips, bolts and nuts, 1 sand box bracket, bolts and nuts, 1 intermediate shaft for cylinder water cock rods with carriers, 2 injectors with feed and overflow cocks, 2 clack boxes, 2 ball and socket union pipes, 2 piston glands and 2 bushes, 4 valve spindle glands, 1 steam blower and whistle cock, 1 steam brake valve and bracket with handle, 2 injector steam cocks, 1 scum cock and handle, 4 glass gauge cocks, 4 cylinder water cocks and levers, 2 steam chest cocks and pipes, 4 cylinder lubricators and 2 pipes, 1 steam blower pipe union and nut, 13 mud plugs, 6 washout plugs and caps, 1 regulator stuffing box and gland with studs and nuts, 1 whistle, 4 slide bar liners, 2 blow-off cocks, 1 mud discharge cock, 1 exhaust steam pipe top (extra), 4 sand pipe guides	8	5	2	7	2	4	.....				1	1	2	0
5 Cases	Each containing 4 brake blocks and hangers, 2 brake tie rods and washers, 2 brake coupling rods with pins and nuts, 2 brake releasing springs with eye bolts and nuts, 1 brake cylinder with piston and gland, bolts and nuts, 6 bearing springs, 12 spring hangers and screws, 12 spring pins, 6 spring pillars, 1 back balance weight with bolts and nuts, 1 set of (34) fire bars, 3 fire bar carriers	7	1	2	7	2	1	.....				1	3	0	0
5 „	Each containing 6 injector-steam, 6 delivery and 2 feed pipes, 2 steam blower pipes, 2 steam brake pipes, 2 sand pipes, 1 scum pipe, 1 whistle pipe, 1 mud discharge pipe, 2 glass gauge drip pipes, 1 reversing rod and pin, 2 sand box rods, 6 cylinder water cock rods, 1 cylinder water cock shaft with 5 cranks and 2 carriers, 1 ashpan rod, 2 boiler handrails, 1 face plate, 2 brake rods for tender, 4 tank handrails with 8 studs and nuts for tender, 1 rake, 1 pricker, 1 dart, 1 clinker shovel, 1 long shovel, 1 short shovel, 1 crowbar, 1 tube plug rod, 1 tube brush rod, 1 galvanised water bucket.	15	9	1	11	1	11	.....				0	8	3	0
5 „	Each containing 1 head lamp, 2 side lamps, 2 gauge lamps, 2 hand lamps, 1 motion lamp, 1 oil bottle, 1 oil can, 1 oil feeder ...	4	3	2	5	2	5	.....				0	2	2	0
	Carried over ...	.....						.....				20	9	3	0

Appendix E.—*concld.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						.....				20	9	3	0
5 Cases	Each containing 6 axle boxes with covers complete for engine, 6 axle boxes with covers complete for tender, 1 set of (12) screw keys, 1 large and 1 small shifting key, 1 heavy, 1 hand, 1 lead, and 1 copper hammer, 6 files and 3 handles (assorted), 6 chisels (assorted), 1 large and 1 small pin punch, 1 cotter punch, 1 foot plate brush, 1 wire tube brush, 1 tube scraper, 1 tallow kettle, 5 pad locks and key..	4	5	2	5	1	9	.....				0	14	0	0
5 Pieces	Each consisting of 1 tender tank and frame, tank with sieve and lid, 2 hind lamp platforms, 2 front and 2 hind tool boxes, bunker door, 28 wood rail pillar brackets, 1 water gauge pipe and top, 4 lifting plates.														
	Frame with horn blocks and clips, 12 spring hanger carriers, 1 front draw spring and pin, 2 intermediate buffers with shoes and guides and hind buffer plate	15	6	6	11	6	1	.....				4	2	0	0
5 „	Each consisting of 1 pair of leading tender wheels on axle complete ...	5	4	2	4	2	4	.....				0	9	1	14
5 „	Each consisting of 1 pair of centre tender wheels on axle complete ...	5	4	2	4	2	4	.....				0	9	1	14
5 „	Each consisting of 1 pair of trailing tender wheels on axles complete ...	5	4	2	4	2	4	.....				0	9	1	14
5 Cases	Each containing 1 cab roof for tender, 1 hind and 2 side rails with 14 pillars, 2 handrail pillars with tops and nuts, 2 hand rail pillar brackets with bolts and nuts	11	10	5	7	1	11	.....				0	15	1	0
5 „	Each containing (tender details) 6 bearing springs and 2 tops for centre buckles, 12 bearing spring links and screws, 1 brake shaft with lever and pin, 2 brake shaft carriers, bolts and nuts, 6 brake blocks and hangers, 6 brake hanger pins and ferrules, 3 brake tie rods and washers, 2 brake coupling rods and 2 pins, 1 brake screw with handle and nut, 1 brake screw pillar, 1 draw buffer with draw hoop and screw coupling combined, 1 draw buffer guide with india-rubber washers, bolts and nuts, 2 draw buffer volute springs, 2 safety links, 1 draw bar, 2 safety pins, 2 copper feed pipes, 2 ball and socket feed cocks and pipes with india rubber washers, 2 carriers for feed cocks with bolts and nuts, 2 feed cocks spindles and handles with guides, 2 life guards, bolts and nuts, 2 foot steps, bolts and nuts, 8 foot board carriers, bolts and nuts, 4 jointing plates for foot boards with bolts and nuts, 1 name plate with bolts and nuts, 1 gong cord guide, 1 gong with bolts and nuts, 2 screw jacks with ratchets and levers	7	10	3	0	2	5	.....				1	5	1	0
	Total gross weight of one Class F engine and tender complete ...	.....						.....				28	14	1	14

Appendix F.

Copy of Packing Account of the S. S. "Counsellor" showing measurements and weight of packages containing parts of A. Class or Locomotive Tank Engine (Metre Gauge) : Makers—Messrs. B. and W. Hawthorn of Newcastle-on-Tyne.

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		F. in.	Ft. in.	Ft. in.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
1 Piece	Consisting of boiler with tubes, stays, copper fire box, brass fusible plug, 5 washout plugs, 1 iron mud-hole cover, 1 cast iron mud-hole cover, fire bar bearer, dome with steam regulator and rod, inside injector steam pipe, smoke box with door, blast pipe, 2 cylinder steam pipes, steam pipe branch and all bolts and nuts, all nuts on studs for boiler mountings, frame with axle box guides and keeps with bolts and nuts, foot-plates, front buffer cast iron casting with 4 bolts and nuts, 2 iron washer plates and 2 india rubber washers, bolts and nuts for hind casing, 2 carriages for rocking shafts with bolts and nuts, 2 brackets with washers and pins for brake gear, 12 spring link brackets rivetted to frame, cylinders with steam chest covers, all nuts on studs for covers, 8 nuts on studs for valve spindle glands and close end caps, 4 bolts and nuts for fixing front buffer guide, supports for slide bars, stays, &c. ...	19 6	7 0	7 6	.....	6 1 1 14
1 Crate	Containing 1 right hand tank with 1 copper strainer	13 10	2 10	4 2	.....	0 17 1 25
1 „	Containing 1 left hand tank with 1 copper strainer	13 10	2 10	4 2	.....	0 17 0 25
1 Piece	Consisting of 1 pair leading wheels on axle	5 1	2 5¼	2 5¼	.....	0 10 0 10
1 „	Consisting of 1 pair driving wheels on axle with outside cranks ...	6 0½	3 8¼	3 8¼	.....	1 1 1 14
1 „	Consisting of 1 pair trailing wheels on axle with outside cranks ...	5 7	3 8¼	3 8¼	.....	0 19 3 14
1 Case	Lined with tin, containing 2 connecting rods with 2 bolts for 1 crosshead, 2 coupling rods complete, 4 eccentric rods and straps complete with four bolts, washers, and steel pins, 1 eccentric rod and strap for pump, 1 reversing weigh bar with 2 bolts, washers, and steel pins, 2 reversing links complete, 2 lifting links, 2 valve connecting rods with 2 bolts, washers, and steel pins, 2 slide valves, 2 valve bridles with 2 distance pieces, 2 valve spindles with 4 brass nuts, 4 slide bars with brackets, bolts, &c., at ends, 4 slide blocks, 2 pistons with rods, packing rings, and crossheads complete. 2 rocking shafts with arms and 4 reversing link sliders complete, 2 pins for sliders with cotters complete, 1 reversing handle with sector and bracket complete, 1 regulator handle, 2 handrails for tank, 4 nuts and washers, 2 handrails for front of boiler, 2 handrail studs with 2 nuts and washers for ditto, 1 flame plate, 2 stands for slide valve lubricators with 4 bolts and nuts, 1 injector rod with handle, bracket, 2 bolts and nuts, sand box gear, 4 rods, 4 levers with 3 washers, bolts, and split pins, 1 gauge for setting slides, 4 crank collars and pins, 2 front cylinder covers, 2 back cylinder covers, studs,					
	Carried over ...				.....	10 7 1 18

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. in.	Ft. in.	Ft. in.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...		.....		.....	10 7 1 18
	and nuts complete, 4 brass liners for slide bars, 2 smoke box handles and fastener, 2 valve spindle glands, 2 valve spindle bushes, 2 valve spindle close end caps, 1 pump with ram cock, lever for cock, &c., complete, 4 bolts and nuts for fixing ditto, pump feed cock gear, 2 pillars with 2 nuts, 2 levers and 1 short rod, 3 levers on bolt, 1 lever for cylinder cock gear, 1 lever for feed cock, and 1 lever for pet cock, 3 handles, and 1 sector in 3 parts, 1 for cylinder cock gear, 1 for feed cock gear, and 1 for pet cock, 5 short rods for cylinder cock gear, 3 short rods for ashpan damper, 1 short rod for pet cock gear, 2 short rods for feed cock gear	6 8½	2 11½	2 5½	.....	1 2 1 3
1 Case	Lined with tin, containing 5 eccentric sheaves, 2 handrail pillars, with nuts and toprail with plate, bolts, and nuts for engineman's platform, 1 gauge lampholder, 1 safety valve complete, 1 injector hanger with 5 bolts and nuts, 1 injector with return clack and cock, bolts, nuts, &c., 2 clack boxes complete, 2 number plates with 4 bolts and nuts, 2 name-plates with 4 screws, 1 blow-off or mud cock, 1 pressure guage cock with stand and union pipe, 4 cylinder cocks with levers and pins, 2 water glass gauge cocks and flanges, 2 ordinary gauge cocks and flanges, 1 regulator stuffing box with box spindle, gland with 2 studs and nuts and nut and washer for spindle end, 4 steam chest cocks, 1 blower cock and handle, 1 injector steam valve with handle, 1 whistle with stand and 2¾ inch bolts and nuts, Roscoe's lubricators, 2 Furness lubricators, 2 washout doors with clips, 6 washout plugs, 1 cap with cock for tank pipe, 2 blast pipe tops, 2 tank plugs, 2 syphons for valve spindles, 2 syphons for slide bars, 2 piston rod bushes (in 4 halves), 1 whistle pipe with 2 couplings, 1 jet cock pipe, 1 water guage pipe, 1 guage cock drain cup and pipe, 2 lubricator pipes with 2 elbows and 4 couplings, 1 pressure gauge, 4 gauge glasses with 8 india rubber rings, 2 tank strainers for manhole, 1 tin oil can, 1 tin oil feeder (long spout), 1 tin oil bottle (½ gallon), 1 wire tube brush, 1 foot-plate brush, 1 large hammer, 1 chipping hammer, 1 lead hammer, 1 copper hammer, 1 12-inch and 1 14-inch bastard file, 1 12-inch round file, 1 14 inch half round file, 1 large monkey wrench, 1 8-inch clyburn spanner, 1 complete set of screw keys, 2 padlocks and keys for tool boxes, 2 pin punches, 1 packing drawer, 1 cotter drift, 1 injector key, 4 check nuts for valve spindle glands, 2 flat chisels, 1 cross cut chisel	4 11½	2 2½	1 11	.....	0 9 0 3
	Carried over ...		.....		.....	11 18 2 24

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. In.	Ft. In.	Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...	.....			.....	11 18 2 24
1 Case	Containing 6 springs with harness complete, 6 axle-boxes complete, 6 axle-box covers, 1 centre buffer for front end with coupling chain complete, 1 centre buffer for back end front end, 1 centre buffer guide for back end with 4⅛ inch top bolts, ashpan gear, 2 handles with bolt, washer, and 3 split pins, 1 sector for ditto, 1 fire door complete, 2 brick arch brackets, 1 10-ton traversing screw jack with lever and ratchet, 1 ash door, 2 side lampholders with 4 bolts and nuts, 1 front lamp holder with 2 bolts and nuts, 4 safe guards with 10 bolts and nuts, 1 crow bar, 1 rake, 1 pricker, 1 plug rod, 1 dart, 1 tube scraper, 1 coal shovel, 1 long shovel ...	5	8½	2 11½ 2 5½	.....	1 1 0 3
1 „	Containing boiler wood clothing, 1 reversing rod with 2 bolts, washers and split pins, 3 tank levelli g pipes with 4 bolts and nuts and 8 collar studs and nuts, 1 brake shaft with two bolts and split pins, 1 brake shaft lever with key and tapered pin, 2 brake shaft carriages with 4 bolts and nuts, 1 brake screw with nut, 2 washers and pins, 1 brake hand wheel, 1 brake screw bracket with bolts, 8 brake rods, 4 brake hangers with wood blocks, 12 coach screws, 2 long bolts with 4 metal washers and split pins at top, 4 collar bolts at bottom with 4 iron washers, 4 metal washers and 8 split pins, 4⅝ inch studs with nuts and split pins at bottom for cross-bars, 2 brake crossbars, 1 long rod for cylinder cock gear, 1 long rod for pet cock gear, 1 long rod for feed cock gear, 2 reversing weigh-bar balance weights with 2 bolts and nuts, 2 reversing weighbar carriages with 10 bolts and nuts and 4 split pins, 1 tank crossstay with 4 bolts and nuts and two tapered pins for handrail, 1 shaft for cylinder cock gear with 3 levers, 2 metal carriages and 4 bolts and nuts, 1 blow-off or mud cock pipe with coupling, 1 injector steam pipe (top) with coupling, 1 injector steam pipe (bottom) with coupling, 1 injector delivery pipe (front) with coupling and 4 bolts and nuts, 1 injector delivery pipe (back) with coupling, 1 injector suction pipe, pump delivery pipe with pet cock lever and split pin, 8 bolts and nuts and coupling for pet cock pipe, 1 pump suction pipe with 8 bolts and nuts, 1 blower pipe (front) with 1 coupling, 1 blower pipe (back) with 1 coupling, and joint nut, 1 blower pipe (inside of smoke box) with 2 couplings and elbows, 2 sand box pipes in 4 parts with 4 bolts and nuts, 1 blower pipe hanger with 2 brass screws, 2inject or delivery, pipe hangers with 4 bolts and nuts, 1 injector steam pipe hanger with two bolts and nuts, 1 tank pipe hanger with 2 tap bolts and 2 sand pipe hangers with 4 bolts and nuts, 1 blow-off pipe hanger with 4 bolts and nuts, 1 long rod for tube brush	9	11½	2 11½ 2 2½	.....	0 16 1 17
	Carried over ...	.....			.....	13 16 0 16

Appendix F.—*concld.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. In.	Ft. In.	Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...	...	..		.....	13 16 0 16
1 Case	Containing 8 boiler clothing sheets, 2 cylinder clothing sheets, 1 defector plate, 1 dome cover, 1 sand box in two parts, bolted together with 2 hand hole covers with 2 chains and hooks, 1 chimney with 8 bolts and nuts, also 2 brackets with 2 tap bolts for lamp stand, 2 large splashers for driving wheels with 4 bolts and nuts, 2 small splashers for leading wheels with 4 bolts and nuts, 4 splasher plates for trailing wheels, wood clothing for dome, 1 smoke-box clothing bead, 1 fire box clothing bead, 1 fire-box clothing plate (front), 6 clothing straps with 5 bolts and nuts, 1 clothing strap for fire-box with 2 tap bolts, 2 tank lids, 2 coal box doors, 4 foot-steps with 8 bolts and nuts. 20½-inch cant head bolts and nuts for tanks. 10½-inch cup head bolts and nuts for tanks. 2⅝-inch cant head bolts and nuts for tanks. 2⅝-inch cant head bolts and nuts for tanks. 6⅝-inch cup head bolts and nuts for tanks. 12⅛-inch tap bolts for splasher plate. 4⅝-inch tap bolts for fire-box clothing ring. 2⅝-inch tap bolts for fire-box clothing ring. 22½-inch cant head bolts and nuts for splasher plates. 10 screws for cylinder clothing, 11 screws for fire-box.					
	Front clothing plate, wood (teak), for engineman's platform ...	5	8½	3 11 3 5½	.....	0 15 2 10
1 „	Containing cab top, wood and iron with through bolts and nuts, cab sides with pillars, cab front with window frames and mountings, 4 cab window glasses in small box, 80 cab bolts and nuts, ½-inch diameter, 16 cab bolts and nuts, ⅝-inch diameter, wood clothing for fire-box	8	8½	8 3 1 11½	.....	0 19 1 18
1 „	Containing ashpan with doors, 2 of ditto forming spark arrestors, 3 single levers split pin, small key, 2 pins and chains, 1 double lever with 3 split pins and washers, 1 small bracket rivetted to 1 door with bolt and split pin, 4 brackets for holding up doors with 8 bolts and nuts, 8 bolts and nuts for fixing ashpan doors, 18 single fire-bars, 2 double fire-bars rivetted together, 1 back end buffer casing with 1 volute spring and 2 washer plates	4	0	3 5½ 1 8½	.....	0 7 3 0
1 „ in Crate	Lined with tin, containing 1 front lamp, 2 side lamps, 2 hand lamps, 2 gauge lamps	5	7	3 5 3 1	.....	0 4 2 14
	Total gross weight of one A class engine and tender complete.				14 14 0 0	16 3 2 2

APPENDIX G.

Statement showing particulars of cost, &c., of (Heavy) Broad Gauge and (Light) Metre Gauge Locomotive Engines compiled from returns received from Railway authorities.

Class of Engine.	Gauge.	English cost, F. O. B.	Entire Sea Freight.	Loss by Exchange.*	Landing and Insurance charges.	Erection Charges. Labour.	Erection Charges. Materials.	Total cost, exclusive of Indian carriage charges.	Remarks.
		£ s. d.	£ s. d.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Engine, Heavy L Class (on Contract No. 884 of 1884-85)	5′ 6″	2,533 5 2	115 16 0	7,214 12 3	495 5 5	255 15 0	230 11 10	34,687 5 10	*Vide* letter No. 638 D. G. R., dated 9th June 1891, from Manager, North Western Railway.
„ H B „ (on Contract No. 1198 of 1888...	„	1,852 0 0	134 16 1	9,228 3 5	445 0 4	753 2 5	524 5 5	30,818 12 1	
„				...	30 0 0	215 0 0	138 5 4	10,083 5 4	*Vide* letter No. 3956-59 W.-R., dated 13th May 1891, from the Manager and Engineer-in-Chief, Burma State Railway.
„ Light A „ ...	Metre.	870 0 0	100 0 0	...	75 0 0	280 0 0	160 10 8	16,031 13 4	
„ Heavy E „ ...	„	1,465 0 0	86 12 4	...	155 0 0	432 0 0	284 0 0	18,945 0 0	
„ F „ ...	„	1,203 0 0	150 0 0	4,544 0 0	257 0 0	791 0 0	426 0 0	21,064 0 0	
„ O „ ...	„	1,245 0 0	150 0 0	5,640 0 0					

* Calculated according to the official rate in force for the year in which the engines were received on the line.

Appendix H.

Statement showing the quantity and rate per cwt., &c., of ironwork and fittings required in the construction of an open Goods Wagon and Brakevan, respectively, 5′ 6″ gauge as obtained from the schedule attached to Contract No. 4093 of 6th November 1890.

Item number in schedule.		RATES DELIVERED FREE ON BOARD IN THE PORTS OF LONDON OR LIVERPOOL.					
		Open Goods Wagon.			Brake Van.		
		Weight.	Rate.	Amount.	Weight.	Rate.	Amount.
		Cwt. qrs. lbs.	*s. d.*	£ *s. d.*	Cwt. qrs. lbs.	*s. d.*	£ *s. d.*
1	Steel channel, H, and angle bar in underframe ... ... per cwt.	22 0 15	18 0	19 18 5	22 0 0	22 6	24 15 0
2	Plate in underframe ... ... „	13 0 23	18 0	11 17 8½	14 3 3	22 6	16 12 6
3	Underframe ironwork ... ... „	8 1 1	30 0	12 7 9	10 2 11	33 6	17 15 1
4	Buffers ... ... „	6 3 1	38 0	12 16 10	6 3 1	38 0	12 16 10
5	Yorkshire ironwork ... ... „	4 0 13	53 0	10 18 2	4 0 8	53 0	10 15 9
6	Cast iron work ... ... „	0 2 10	11 6	0 6 9¼	5 0 14	11 6	2 8 11¼
7	Brake gear ... . „	1 2 22	36 0	3 1 1	9 2 6	37 0	17 13 6
8	Steel angle, &c., bar in wagon body ... „	8 3 7	25 6	11 4 8½	...	...	...
9	Plate in wagon body ... .. „	7 0 25	25 6	9 4 2	...	...	...
10	Body ironwork ... ... „	3 3 7½	30 0	5 14 6	0 3 13	33 0	16 5 7
11	Panel plates, for brake van ... ... „	...	...	...	6 1 2	25 0	7 16 8½
12	Hoop iron ... ... „	...	...	...	1 0 15	18 0	1 0 5
13	Bolts, nuts, coach-screws, split pins, and washers ... ... „	1 0 2	26 0	1 6 5½	3 3 8	27 3	5 4 2
14	Rivets ... ... „	1 2 9½	24 0	1 18 0	1 1 0	24 0	1 10 0
15	Iron, wood-screws ... ... per gross.	...	...	...	583 doz.	2 0	4 17 2
16	Galvanized corrugated wrought iron roofing sheets ... ... per cwt.	...	...	...	6 0 3	28 0	8 8 9
17	Galvanized wroughtiron washer bars ... „	...	...	...	0 1 18½	24 0	0 10 0
18	Galvanized bolts and nuts, coach-screws, and washers ... ... „	...	...	...	0 0 26½	56 0	0 13 1½
19	Gun-metal lamp rings ... ... Each	...	...	...	No. 1	3 0	0 3 0
20	„ door handles, with locks (single handle) ... ... „	...	...	...	„ 1	5 6	0 5 6
21	Gun-metal staples for ditto ... „	...	...	...	„ 1	0 5	0 0 5
22	„ escutcheons ... ... „	...	...	...	„ 2	0 4	0 0 8
23	„ doors hinges 3″ × 2″ ... „	...	...	...	„ 4	1 5	0 5 8
24	„ hinges for dog-box lid, 3″ × 1½″ „	...	...	...	„ 4	1 4	0 5 4
25	Gun-metal hinges for dog-box door, 1¾″ × 1¾″ ... ... „	...	...	...	„ 4	0 10	0 3 4
26	Gun-metal hinges for guards' glasses, 2″ × 1″ ... ... „	...	...	...	„ 4	0 10	0 3 4
27	Gun-metal hinges for letter-box, 2″ × ¾″... „	...	...	...	„ 4	0 8	0 2 8
28	„ knobs or plates ... ... „	...	...	...	„ 6	0 5	0 2 6
29	„ spiral spring handles with iron plate ... ... „	...	...	...	„ 2	4 6	0 9 0
30	Gun-metal bolts for guards' look-out glasses „	...	...	...	„ 2	1 3	0 2 6
31	„ buttons for guards' windows „	...	...	...	„ 2	0 3½	0 0 7
32	„ pulleys with cast iron bracket, lower ... ... „	...	...	...	„ 1	4 0	0 4 0

Appendix H.—*concld.*

Item number in schedule.			RATES DELIVERED FREE ON BOARD IN THE PORTS OF LONDON OR LIVERPOOL.					
			Open Goods Wagon.			Brake-van.		
			Weight.	Rate.	Amount.	Weight.	Rate.	Amount.
33	Gun-metal pulleys, with cast-iron bracket, upper	Each	Cwt. qrs. lbs. ...	*s. d.* ...	£ *s. d.* ...	Cwt. qrs. lbs. No. 1	*s. d.* 5 6	£ *s. d.* 0 5 6
34	Brass plates and leather straps for windows	,,	...	...	...	,, 2	0 4	0 0 8
35	Iron private locks and plates ...	,,	...	...	...	,, 2	0 7	0 1 2
36	,, bolts and staples for partition doors ...	,,	...	...	...	,, 1	2 6	0 2 6
37	,, butt hinges for partition doors 3″ × 1½″	,,	...	...	...	,, 6	0 10	0 5 0
38	Iron hooks and eyes for guards' glasses ...	,,	...	...	...	,, 2	0 9	0 1 6
39	Cast-iron striking plate for guards' spiral spring handles	,,	...	...	...	,, 2	0 7	0 1 2
40	Copper panel pins	per lb.	...	...	...	lb. 1	1 6	0 1 6
41	Wrought iron enamelled commode with cast-iron top, teak wood lids, gun-metal hinges, &c., complete	Each	...	...	..	No. 1	140 0	7 0 0
42	Underframe, underframe and body steel and ironwork for one ballast wagon ...	Set	...	...	100 14 6½	...	...	...
43	Underframe, underframe and body steel and ironwork, roofing, lavatory and metallic fittings and panel pins for one brake van	,,	...	...	...	...	...	160 1 0½

FROM

THE DIRECTOR GENERAL
OF RAILWAYS,

TO

Circular No. 2.

Dated Calcutta, 1st March 1892.

Received

INDIAN STATE RAILWAYS.

RATE LIST, CLASS E.— Rolling Stock for 1890.

G. C. Press, Simla.—No. 824 P. W. D.—9-3-92.—983.

Circular No. 2.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

TO

THE MANAGER, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE SUPERINTENDENT OF WORKS, HYDERABAD-UMARKOT RAILWAY.
THE ENGINEER-IN-CHIEF, MU VALLEY RAILWAY.
THE ENGINEER-IN-CHIEF, BENGAL ASSAM RAILWAY, NORTHERN SECTION.
THE ENGINEER-IN-CHIEF, EAST COAST RAILWAY.
THE ENGINEER-IN-CHIEF, KISTNA BRIDGE.
THE ENGINEER-IN-CHIEF, MUSHKAF-BOLAN STATE RAILWAY.
THE ENGINEER-IN-CHIEF, FRONTIER RAILWAY SURVEYS.
THE ENGINEER-IN-CHIEF, KASHMIR RAILWAY SURVEYS.
THE ENGINEER-IN-CHIEF, GOONA-BINA RAILWAY SURVEYS.
THE ENGINEER-IN-CHIEF, UJAIN-BHOPAL RAILWAY SURVEYS.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

Rate List, Class E.—Rolling Stock for 1890.

Calcutta, the 1st March 1892.

SIR,

I have the honour to forward, for information and guidance, a printed statement, showing the actual English rates *free on board* in England for Class E Stores, "Rolling Stock," contracted for by the Stores Department of the India Office during 1890.

2. A table giving the average rate per ton, of sea-freight, for Class E Stores imported from England to the several ports in India for State Railways during 1890-91 is prefixed to the Rate List.

I have the honour to be,

SIR,

Your most obedient Servant,

R. A. SARGEAUNT, Lieut.-Colonel, R.E.,
Officiating Director General of Railways.

Documents accompanying.

1. Statement showing the average rate per ton for entire sea-freight on Class E Stores imported from England at the several ports during 1890-91.
2. Rate List, Class E, Rolling Stock for 1890.

The Secretaries to the Governments of Bombay, Madras, Bengal, the North-Western Provinces and Oudh, and the Punjab, Public Works Department.
The Secretaries to the Chief Commissioners of the Central Provinces, Burma and Assam, Public Works Department.
The Secretaries to the Residents at Hyderabad and in Mysore, Public Works Department.
The Secretaries to the Agents to the Governor General, Rajputana and Central India, and Baluchistan, Public Works Department.
The Superintendent of Port Blair and Chief Commissioner, Andaman and Nicobar Islands.
The Director General of Telegraphs.
The Director General of Military Works.
The Accountant General, Public Works Department.
The Comptroller General.
The Accountant General, Bengal.
The Consulting Engineer for Railways, Madras.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Central Division.
The Agent and General Manager, Assam Railways and Trading Company, Limited.

Copy forwarded to the Local Governments, Administrations and Officers noted in the margin, for information.

Lieut.-Colonel, R.E.,
Officiating Director General of Railways.

To The Secretary to the Government of Madras
Public Works Department.

Enclosure to Director General of Railways' Circular No. 2 of 1892.

RATE LIST.

CLASS E.

ROLLING STOCK.

FOR 1890.

G. C. Press, Simla.—No. 824 P. W. D.—23-3-92—983.

Enclosure to Director General of Railways' Circular No. 2 of 1892.

RATE LIST.

CLASS E.

ROLLING STOCK.

FOR 1890.

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(*a*) Locomotives— 1

5′ 6″ gauge ... ... 2—10

Spare parts of— 11

Metre gauge ... ... 11—15

Spare parts of— ...

(*b*) Coaching and Goods Stock—

(1) Complete Ironwork for vehicles— 16

5′ 6″ gauge ... ... 17—18

Metre gauge ...

(2) Ironwork— ... ... 19—24

5′ 6″ gauge ... ... 25—26

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Appendices.

A.—Detail of a set of duplicates for compound engines, 5′ 6″ gauge 35—36

B.—Statement showing measurement and weight of heavy L class engine, (5′ 6″ gauge) ... ... 37—41

C.—Statement showing measurement and weight of E class, engine (metre gauge) ... ... 42—45

D.—Statement showing measurement and weight of O class engine 46—51

E.—Statement showing measurement and weight of F class engine 52—55

F.—Statement showing measurement and weight of A class engine 56—59

G.—Statement showing cost of heavy broad gauge, and light metre gauge engines compiled from Returns received from Railway authorities 60

H.—Statement shewing the quantity and rate per cwt. of iron-work and fittings required in the construction of an open Goods Wagon and Brake Van respectively (5′ 6″ gauge) as obtained from the Schedule attached to Contract No. 4093 of 6th November 1890 ... ... 61—62

Enclosure No. 1 to Director General of Railway's Circular No. 2 of 1892.

Statement showing the latest average Rates per ton for entire Sea-freight on Locomotive and Rolling-stock materials sent out from England to the several ports in India for State Railways of both gauges.

Description of materials.	Port of Bombay.	Port of Calcutta.	Port of Karachi.	Port of Rangoon.	Remarks.
	s. *d.*	*s.* *d.*	*s.* *d.*	£	
Engines, locomotive, complete	*	65 0 (B.G.)	51 3 (B.G.)	100 Each M.G.	* No engines received.
				s. *d.*	
Engines, locomotive, spare parts of—... ...	21 3	20 4	42 0	35 0	These rates of sea-freight may be taken for both broad and metre gauge materials.
Coaching stock, underframe, and body ironwork for—	33 0	30 8	30 6	35 0	
Goods stock, underframe, and body ironwork for—	33 0	25 0	27 3	40 0	
Wheels and axles, axle-boxes, springs, couplings, &c.	17 6	18 6	17 5	27 0	
Other carriage and wagon fittings	Five per cent.	on the original cost for all parts.		...	
Cranes, accident	†	27 6	40 5	43 0	† None received.

Enclosure to Director General of Railways' Circular No. 2 of 1892.

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CLASS E.

ROLLING STOCK.

FOR 1890.

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FOR 1890.

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(1) Complete Ironwork for vehicles—

5′ 6″ gauge 16
Metre gauge ... ... 17—18

(2) Ironwork—

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	s. *d.*	*s.* *d.*	*s.* *d.*	£	
Engines, locomotive, complete	*	65 0 (B.G.)	51 3 (B.G.)	100 Each M.G.	* No engines received.
				s. *d.*	
Engines, locomotive, spare parts of—... ...	21 3	20 4	42 0	35 0	These rates of sea-freight may be taken for both broad and metre gauge materials.
Coaching stock, underframe, and body ironwork for—	33 0	30 8	30 6	35 0	
Goods stock, underframe, and body ironwork for—	33 0	25 0	27 3	40 0	
Wheels and axles, axle-boxes, springs, couplings, &c.	17 6	18 6	17 5	27 0	
Other carriage and wagon fittings	Five per cent.	on the original cost for all parts.		...	
Cranes, accident	†	27 6	40 5	43 0	† None received.

CLASS E.

ROLLING STOCK.

(*a*).—LOCOMOTIVES.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES.

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4190	16-12-90	Engines, Locomotive—complete.	Compound, six wheels (coupled) with a two-wheeled Bissel truck in front, inside cylinders, 20 inches and 28 inches diameter, inside frames, and separate tenders on two four-wheeled bogie trucks, makers Neilson & Co.	2,875*	0	0	Each.	*Engine ... £2,255 0 0 Tender ... 620 0 0 Total delivered in the port of London 2,875 0 0
			One set of duplicates for above	2,709†	10	0	Set.	†For details see Appendix A., pages 35 and 36.
			General dimensions of the engines and tenders are as follow :—					
			Engine.					
			Diameter of H. P. Cylinders ... ... 20 inches.					
			,, L. P. ,, ... 28 ,,					
			Length of stroke ... ... 26 ,,					
			Diameter of coupled wheels ... ... 5 feet 1½ ,,					
			,, of Bissel ,, ... 2 ,, 10 ,,					
			Coupled wheel base ... ... 14 ,, 6 ,,					
			Total wheel base ... ... 20 ,, 7½ ,,					
			Working steam pressure per square inch ... 180 lbs.					
			Heating surface external tubes ... ... 1,119 sq. feet.					
			,, ,, fire box ... ... 113 ,,					
			Total heating surface ... ... 1,232 ,,					
			Grate area ... ... 22 ,,					
			Number of wheels (two four-wheeled bogies) ... 8					
			Wheel base ... ... 18 feet					
			Diameter of wheels ... ... 2 feet 10 inches.					
			Capacity of tank ... ... 3,400 gallons.					
			Fuel space ... ... 200 c. ft.					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—	Axles.	Bogie, for H. class engines	4	10	8	Each.	
				„ „ H. B. class engines	5	1	1	„	
3167	10-1-90 ...			„ „ L. „ „	5	2	6	„	
				Engine, for H. „ „	7	15	6	„	
				„ „ H. B. „ „	8	7	8	„	
				„ „ L. „ „	8	17	9	„	
4174	1-12-90 ...			Leading, for K. & S. engines, turned and finished except on wheel seats ...	9	13	6	„	
				Tender, twin	9	5	3	„	
				„ for H. B. class engines	6	14	8	„	
3167	10-1-90 ...			„ „ L. „ „	8	0	11	„	
				„ „ L. „ „	7	14	6	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3250	17-2-90 ...	Engines, Locomotive—spare parts of—contd.	Beams ...	Buffer, engine, 9′ 6″ × 1′ 2″ × 1¼″, for L. class engine	40	0	0	Each.	
4043	28-10-90 ...		Boilers.	Locomotive, complete, with internal steam pipes, fire bars and bearers, for H. class engines.	638	0	0	Each.	
				Locomotive, complete, with internal steam pipes, fire bars and bearers, for K. and S. class engines.	695	0	0	„	
3974	21-10-90 ...		Brake gear.	Automatic, vacuum, for engine, complete (similar to that supplied on contract No. 2874).	80	0	0	Set.	*Vide* E. Class Rate List for 1889, page 38.
				Automatic Vacuum, for Engines, spare parts of—					
				Hosepipe, with couplings 2″ × 18″	1	8	0	Each.	
				„ with ball couplings 1″ × 18″...	1	12	0	„	Between engine and tender.
4022	24-10-90 ...			„ 1″ × 36″ from cylinder to train pipe connections	0	8	0	„	
				„ ¼″ × 18″ from engine cylinder to pipe	0	5	6	„	
				Packing, for piston rod	0	1	3	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—*contd.*	Brake gear—*contd.*	Rings, joint, for 21″ cylinders	0	10	0	Each.	
				„ „ „ 18″ „	0	10	0	„	
4022	24-10-90 ...			„ rolling, India-rubber, for 18″ cylinder	0	5	6	„	
				„ „ „ „ „ 21″ „	0	6	0	„	
				Washers, seating, 50 m-m ejector clappet valve	0	0	9	„	
			Gauges Pressure	Steam, 200 lbs., metal face, not enamelled, 6″ dial	1	1	6	Each.	
				„ „ „ „ „ „ 7″ „	1	5	0	„	Bourdon's patent.
3242	14 -2-90 ...			„ spare tubes, for H class, heavy L class, and L class engines ...	0	3	6	„	
3987	21-10-90 ...		Glasses gauge.	Engine 20″ × ¼″ outside diameter	0	5	0	Dozen.	
3560	10 -6-90 ...			„ 18″ × ¼″ „ „	0	5	7½	„	
3223	4 -2-90 ...			„ 14″ × ¼″ „ „	0	2	7½	„	
				„ 12″ × ¼″ „ „	0	3	0	„	Less discount 40 per cent.
3560	10 -6-90 ...			„ 12″ × ¼″ „ „	0	3	0	„	
3796	30 -8-90 ...			„ 12″ × ¼″ „ „	0	3	0	„	
4110	7-11-90 ...			„ 12″ × ¼″ „ „	0	3	0	„	Less discount 37½ per cent.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.	Cwt.	qrs.	lbs.
3569	12 -6-90 ...	Engines, Locomotive—spare parts of—*contd.*	Glass ...	Spectacle, British polished plate, best glazing quality, white, 16½″ diameter × ⅛″	0	3	4	Pane.				
3753	1 -8-90 ...		Injectors.	No. 8 m. m.	10	10	0	Each.				
4139	11-11-90 ...			For B. class engines (O. & B. R.)	10	10	0	„				
			Plates.	*Boiler Barrel, for H class engines.*								
				12′ 8½″ × 3′ 6″ × 7/16″					Estimated weight ...	7	1	20
3965	16-10-90 ...			12′ 10½″ × 3′ 6″ × 7/16″	26	5	0	Ton.	„ „ ...	7	2	7
				13′ 1½″ × 3′ 6″ × 7/16″					„ „ ...	7	2	22
				Fire box, copper.								
3563	10 -6-90 ...			Back	14	3	5	Each.	Estimated weight ...	3	1	0
				„	19	7	1	„	„ „ ...	4	3	0
4141	11-11-90 ...			„	17	5	0	„				
3563	10 -6-90 ...			Crown, 3′ 10½″ × 3′ 2½″ × 7/16″	8	3	8	„	„ „ ...	2	1	0
4141	11-11-90 ...			„ 3′ 10½″ × 3′ 2½″ × 7/16″	9	17	6	„				

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—*contd.*	Rings—*contd.*						
3214	3 -1-90 ...			India-rubber, for gauge glasses, ¼″ hole, $\frac{1}{16}$″ thick	0	17	8	$^{9}/_{00}$	
3785	23 -8-90			¼″ „ $\frac{5}{16}$″ „	0	15	0	„	
				$\frac{5}{16}$″ „ $\frac{5}{16}$″ „	1	1	6	„	
3520	30 -5-90			¼″ „ internal diameter	1	5	0	„	
				⅜″ „ „ „	1	0	0	„	
3564	21-10-90 ...			¼″ for $\frac{5}{16}$″ gauge glass	1	0	10	„	
3940	15-10-90 ...		Sheaves ...	(Or Friction Rollers) cast steel, each 9″ long × 6″ diameter with flanges 2″ high for incline engine plane, each fitted with Hadfield's patent self oiling pedestals.	0	18	6	Each.	
			Tubes.	Boiler, brass—					lbs.
				10′ 2¼″ × 1¼″ × 11 and 13 B. W. G.					100 tubes = 2,058
				10′ 2¼″ × 1¼″ × 11 and 13 „ for H. B. class engines					100 „ = 2,062
3207	31 -1-90			10′ 9″ × 2″ × 11 and 13 „ K. & S. „ ...	0	0	7¼	lb.	100 „ = 2,486
				10′ 9″ × 1¼″ × 11 and 13 „ P. „ ...					100 „ = 2,349
				11′ 7¼″ × 1¼″ × 11 and 13 „ L. „ ...					100 „ = 2,344

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
		Engines, Locomotive—spare parts of—*contd.*	Tubes—*contd.*	Boiler, Brass—*contd.*					lbs.
3786	22 -8-90 ...			11′ 7¼″ × 1¼″ × 11 and 13 B. W. G.	0	0	8½	lb.	100 tubes = 2,313
3207	31 -1-90 ...			12′ 3½″ × 2″ × 11 and 13 „ for Q. Class Engine ...	0	0	7¼	„	100 „ = 2,819
3420	29 -4-90 ...			13′ 2″ long, 2″ diameter outside, No. 9 and 13 B. W. G. thick ...	0	0	8	„	100 „ = 3,002
4119	13-11-90 ...			Boiler, brass	0	0	8½	„	100 „ = 1,970
3565	10 -6-90 ...			„ „	0	0	8	„	
3177	22 -1-90 ...			Mild steel, locomotive, 10′ 1⅛″ × 2″, expanded to 3¼″ at end for a length of 3″, and 13 B. W. G. throughout.	0	14	4	Each.	
			Tyres.	Bogie } for H. B. class engine	3	8	9	Each.	
				Engine }	7	0	6	„	
				Bogie }	3	14	6	„	
				Engine } „ „ „	7	15	4	„	
3171	15 -1-90			Tender }	4	15	6	„	
				Engine, leading }	8	17	6	„	
				„ driving } for K. and S. class engines	8	17	6	„	
				Tender }	5	5	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3171	15 -1-90 ...	Engines, Locomotive—spare parts of—*contd.*	Tyres—*contd.*	Bogie } for L. class engines	3	8	9	Each.	
				Engine, leading } for L. class engines	6	7	6	"	
				" middle } for L. class engines	6	6	0	"	
				" trailing } for L. class engines	6	7	6	"	
				Tender } for L. class engines	4	4	0	"	
				Driving } for J. class engines	8	4	3	"	
				Leading } for J. class engines	8	4	3	"	
				Trailing } for J. class engines	8	4	3	"	
4145	11-11-90 ...			Steel, for locomotive and tender wheels	4	12	6	"	

Metre Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3701	6 -8-90 ...	Engines Locomotive—spare parts of—	Axles.	Leading, driving, and trailing, for F class engines, with cranks finished complete, with the exception of the wheel seats, where an allowance of ¼″ in diameter is left for finishing in India	52	13	4	Set.	
3735	24 -7-90 ...			Leading, best fagotted iron	10	0	0	Pair.	
3760	6 -8-90 ...		Boilers.	Locomotive, for F class engines fitted with smoke-boxes, smoke box doors, chimneys, fire bars, and bearers and all mountings, fitting, and clothing complete, ready to put in frames	448	13	4	Each.	To suit engines supplied under contract E 202.
3760	" ...		Cocks.	Gauge, column, asbestos packed, for F class engine	7	2	0	Set.	Dewrances patent.
2941	21 -1-90 ...		Cranks.	Driving, for axles } for A class engines	11	10	0	Each.	
				Trailing " } for A class engines	11	10	0	"	
3470	15 -5-90 ...		Cross heads.	Piston, right and left hand, for new F class engines	38	0	0	Pair.	
3760	6 -8-90 ...		Cylinders.	Right and left, finished, complete with glands, &c., and covers complete, for F class engines	79	0	0	Pair.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3171	15 -1-90 ...	Engines, Locomotive—spare parts of—*contd.*	Tyres—*contd.*	Bogie	3	8	9	Each.	
				Engine, leading	6	7	6	"	
				" middle } for L. class engines	6	6	0	"	
				" trailing	6	7	6	"	
				Tender	4	4	0	"	
				Driving	3	4	3	"	
				Leading } for *J.* class engines	3	4	3	"	
				Trailing	3	4	3	"	
4145	11-11-90 ...			Steel, for locomotive and tender wheels	4	12	6	"	

Metre Gauge.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3703	6 -8-90 ...	Engines Locomotive—spare parts of—	Axles.	Loading, driving, and trailing, for F class engines, with cranks finished complete, with the exception of the wheel seats, where no allowance of ¼" in diameter is left for finishing in India	52	13	4	Set.	
3735	24 -7-90 ...			Loading, best fagotted iron	10	0	0	Pair.	
3760	6 -8-90 ...		Boilers.	Locomotive, for F class engines fitted with smoke-boxes, smoke box doors, chimneys, fire bars, and bearers and all mountings, fitting, and clothing complete, ready to put in frames	448	13	4	Each.	To suit engines supplied under contract E 302.
3760	" ...		Cocks.	Gauge, column, asbestos packed, for F class engine	7	2	0	Set.	Dewrances patent.
2941	21 -1-90 ...		Cranks.	Driving, for axles } for A class engines	11	10	0	Each.	
				Trailing }	11	10	0	"	
3470	15 -5-90 ...		Cross heads.	Piston, right and left hand, for new F class engines	58	0	0	Pair.	
3760	6 -8-90 ...		Cylinders.	Right and left, finished, complete with glands, &c., and covers complete, for F class engines	79	0	0	Pair.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*).—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4023	24-10-90 ...	Engines, Locomotive, spare parts of—*contd.*	Gauges, Pressure.	Steam, Bourdon's, to register up to 200 lbs. with brass cases, 7" diameter central hand, without couplings, nipples ¼" diameter screwed, 18 threads per inch	1	0	6	Each.	
3315	3 -3-90 ...			Steam, Bourdons, to register up to 200 lbs. dials, 7" diameter	1	2	6	"	
3409	24 -5-90 ...			" " " " "	1	2	6	"	With gun metal cocks and tail pipes.
3689	8 -7-90 ...			" " " " 6", tubes for ...	0	7	9	"	
			Glasses Gauge.	For Locomotive Engines—					
3987	21-10-90 ...			7½" × ¼" external diameter, for O class engines	0	2	3	Dozen.	Less 40 per cent. discount.
				8" × ¼" external diameter, for A class engines	0	2	3	"	
4160	17-11-90 ...			8" × ¼" " " plain	0	3	4½	"	
3987	21-10-90 ...			8½" × ¼" " " for F class engines	0	2	4½	"	
4160	17-11-90 ...			9" × ¼" " " plain	0	2	6	"	
3987	21-10-90 ...			9½" × ¼" " " for E class engines	0	2	6	"	
				10½" × ¼" " " plain	0	2	7½	"	
3471	15 -1-90 ...			15½" × ¼" " " "	0	3	10½	"	
				31½" × ¼" " " "	0	7	10½	"	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a*.)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3752	1-8-90 ...	Engines, Locomotive—spare parts of—*contd.*	Injectors.	Right and left hand	9	15	0	Set.	Gresham's patent.
3473	15-5-90 ...			" " for F class engines	9	15	0	"	
3753	1-8-90 ...			Brass cases, for—	2	5	0	"	
			Pins	Split Cotter—					
3352	18-3-90 ...			Long diameter					
				1" × ¼"	0	0	5	Gross.	
				1¼" × ¼"	0	0	5½	"	
				1½" × ¼"	0	0	6	"	
				1½" × 1/16"	0	0	7½	"	
				2" × 1/16"	0	0	9	"	
				2½" × 1/16"	0	0	10½	"	
				3" × 1/16"	0	1	0½	"	
				3" × ¼"	0	1	7½	"	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3409	12-4-90	Engines, Locomotive—spare parts of—*contd.*	Pins—*contd.*	Split, taper, steel—					
				Long diameter at thick end—					
				1¼" × ⅞"	0	6	0	Gross.	
				1¼" × ⅞"	0	7	0	„	
				2" × ¼"	0	8	0	„	
				2¼" × ¼"	0	8	6	„	
				2¼" × ¼"	0	9	6	„	
				2¼" × ⅞"	0	10	6	„	
				4" × ¼"	0	13	6	„	
				4" × ⅞"	0	15	6	„	
3737	26-7-90		Pipes.	Flexible, feed, for engine tenders, with coil inside, of galvanized steel wire, B. W. G. length 2' 8," diameter inside 2"	0	6	4	Each.	
3771	14-8-90		Springs.	Buffer, for engine	0	8	6	Each.	
				„ intermediate, with buckles, complete	1	8	0	„	
3452	13-5-90			Leading, for A class engines	0	13	3	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*a.*)—LOCOMOTIVES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3771	14-8-90	Engines, Locomotive—spare parts of—*contd.*	Springs—*contd.*	Tender, with buckles, complete	16	0	0	Each.	
				Trailing, end, with buckles, complete	18	0	0	„	
3452	13-5-90			„ transverse, for E class engine	1	16	6	„	
3497	24-5-90		Tubes.	Boiler, brass: 8' 6¼" × 1¾" × 11 and 12 B. W. G.	0	0	7½	lb.	100 tubes = 1,525 lbs.
			Tyres.	Driving	3	10	0	Each.	
3453	13-5-90			Leading } for A class engines	2	4	0	„	
				Trailing }	3	10	0	„	
3182	23-1-90			Tender for E. „ „	2	9	2	„	
3453	13-5-90			Driving	3	13	0	„	
3748	29-7-90			Engine	3	14	6	„	
3453	13-5-90			Leading } for F class engines	3	13	0	„	
3748	29-7-90			Tender	2	1	6	„	
3819	10-9-90			Trailing (3' 0" gauge) for Vulcan Foundry Engines	5	0	0	„	Jorhat Railway.
3860	29-9-90		Washers.	Vulcanized, India-rubber, 6" diameter × 2" hole × 2" thick, for engine buffer	0	5	8	Each	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(5)—Trimmings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3451	13- 5-90 ...	Buttons ...	Covered with rep	0	1	5	Gross.	
3477	16- 5-90	Buttons ...	Buff color, hide, for carriage cushions	0	1	7	„	
			Green morocco „ „ „	0	0	8	„	
3311	1- 3-90	Carpets ...	Dark green ground, fern pattern, 12′ 6″ × 6′ 0″	2	14	8	Each.	Suitable for first class saloon carriage.
			Plain, 5 frame, brussels, without border, to pattern 3145-2 but with darker ground.	3	2	3	„	
3445	8- 5-90 ...	Cloth.	Baize, green, for lamp shades, 2′ wide	0	3	6	L. yd.	
3464	5- 5-90 ...		Brown holland, 54″ wide, best	0	0	10½	„	Weight 11¼ oz. per yard.
3297	28 -3-90 ...		Canvas, common, 36″ wide, plain without coloured stripes	0	1	2½	„	
3464	15- 5-90 ...		„ „ 36″ wide	0	0	8½	„	
3429	6- 5-90		„ prepared for roofing, 19′ 0″ × 8′ 6″	2	5	0	Piece.	
			„ „ „ „ 19′ 6″ × 9′ 0″	2	8	9	„	For inspection carriage and brake vans.
3451	13- 5-90 ...		Carriage, rep, maroon, 54″ wide, all wool	0	5	6	L. yd.	
3317	5- 3-90 ...		Floor, 3′ wide	0	2	9	„	Suitable for first and composite carriages.
3418	26- 4-90 ...		„ 3′ „	0	2	9	„	
3570	12- 6-90 ...		„ 22′ 4″ × 8′ 4″	3	5	0	Piece.	
4153	14-11-90 ...		„ 22′ 4″ × 8′ 4″	4	0	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS—*contd.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3332	11-3-90 ...	Hair, Horse ...	Curled and coiled	8	8	0	Cwt.	
3636	1 -7 -90 ...		" " "	8	8	0	"	
3437	8 -5 -90 ...	Hides ...	Buffallo, buff colour, french grained, hand buffed, to average 56 square feet per hide.	0	1	0	Sq. foot.	Lion Brand.
3631	30-6 -90 ...		Horse, white, to average 18 lbs. per hide	0	1	6	lb.	
3451	13-5 -90 ...	Lace ...	Seaming, to match rep	0	0	2	L. yd.	
4031	30-10-90 ...	Linerusta Walton	Mounted on cloth, 36" × 1' 7½", of a pale buff colour, with monogram embossed on it, with a small pattern—suitable for the roof of 1st class carriages.	1	6	9	Piece.	
3436	8 -5 -90 ...	Log Line ...	½" diameter, in 1 lb. balls	0	1	0	lb.	
3432	20-5 -90 ...	Netting ...	Silk, cord, maroon colour, 10" wide and 1" mesh	0	1	8	L. yd.	
4032	25-10-90 ...		" " " " 9" mesh in 25-yard lengths	0	1	0½	"	For hat rack.
3398	13-3 -90	Pins ...	Wire, grasp, trimming, black ½"	0	0	6	lb.	
			" " " " ¼"					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (5).—TRIMMINGS—*concld.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3571	12-6-90 ...	Skins ...	Morocco, grained, maroon colour, cowhide, to average 46 sq. feet per hide ...	0	1	0	Sq. ft.	
3879	3-10-90 ...	Spring ...	Spiral, steel, copper plated, 6" in height at rest, No. 10 S. W. G., for 1st class carriage seats.	0	0	1½	Each.	
		Tacks.	Cut, black, flat heads, sharp points, fine, ½"	0	0	2½	lb.	
3313	1 -3-90		" " " " " " " ¾"	0	0	2	"	
			Cut, tinned " " " " " ¾"	0	0	3½	"	
			Flemish, black, fine, ½"	5	9	0	Cwt.	
3806	8-10-90		" " " ¾"	3	7	0	"	
3436	8 -5-90 ...	Thread.	Linen, black, No. 35, 3 cord, in ¼ oz. skeins	0	2	2	lb.	
			Linen, dark yellow, machine, sewing; on 4 oz. reels No. 18	0	1	11	"	
3503	19-6-90		" white " " 4 oz. " "	0	2	2	"	
3541	5 -6-90 ...		Flax, fine, shoe, in 2 oz. balls and 3 lb. papers	0	1	2½	"	
3807	8-10-90 ...		" " sewing, in 2 oz. balls and 3 lb. papers	0	1	2½	"	
3691	8 -9-90 ...		" " shoe 2 oz. " " 3 lb. "	0	1	2½	"	
3436	8-5-90 ...	Twine ...	Sailmakers	0	1	2	lb.	

Appendix A.

Detail of one set of duplicates for compound engines and tenders six wheels (coupled) 5′ 6″ gauge, as supplied under Contract No. 4190, dated 16th December 1890, for the East Coast Railway—vide *page 1.*

Description of Stores.	Quantity.	Rate each delivered F. O. B. in the		
		Port of London.	Port of Liverpool or Birkenhead.	Port of Glasgow.
Engine.		£ s. d.	£ s. d.	£ s. d.
Engine frames	1 pair	47 0 0	46 0 0	44 0 0
Wheels and axles	1 set	380 0 0	370 0 0	360 0 0
Tyres	1 „	70 0 0	68 0 0	66 0 0
Axles	1 „	139 0 0	137 0 0	135 0 0
Crank pins	1 „	9 0 0	8 15 0	8 10 0
Bearing springs for (Bissel), leading, driving and trailing wheels.	3 sets	72 0 0	71 0 0	70 0 0
Axle boxes, complete	1 set	57 0 0	56 0 0	55 0 0
Connecting rods	1 „	39 0 0	38 10 0	38 0 0
Coupling rods	1 „	46 0 0	45 10 0	45 0 0
Slide bars	1 „	50 0 0	49 0 0	48 0 0
Cylinders	1 „	106 0 0	103 0 0	100 0 0
High pressure pistons	2	7 0 0	6 10 0	6 0 0
Low pressure pistons	2	11 0 0	10 10 0	10 0 0
Piston, rods, 4 high and 2 low pressure ...	6	17 0 0	16 10 0	16 0 0
Valve gear	1 set	68 0 0	67 0 0	66 0 0
Intermediate draw gear	1 „	13 10 0	13 0 0	12 10 0
Draw gear for front of engine	1 „	7 10 0	7 5 0	7 0 0
„ „ „ back of tender	1 „	7 10 0	7 5 0	7 0 0
Buffers	4	17 0 0	16 10 0	16 0 0
Injectors	2	37 0 0	36 10 0	36 0 0
Clack boxes	2	11 0 0	10 15 0	10 10 0
Pressure gauges	6	20 10 0	20 5 0	20 0 0
Spiral safety valve springs	2	1 0 0	1 0 0	1 0 0
Boiler tubes and ferrules	2 sets	460 0 0	455 0 0	450 0 0
Fire bars	10 sets	55 0 0	50 0 0	45 0 0
Gauge glasses and India-rubber rings	5 and 10 gross of each	11 0 0	10 10 0	10 0 0
Spectacle glasses	10 „	3 10 0	3 5 0	3 0 0
Lamps	2 sets	21 0 0	20 10 0	20 0 0
Steam brake gear	1 set	58 0 0	55 0 0	52 0 0
Boiler.				
Boiler barrel plates	1 set	112 0 0	108 0 0	105 0 0
Front tube plate	1	16 10 0	15 15 0	15 0 0
Copper tube plates	2	78 0 0	76 10 0	75 0 0
Copper tube and side plate	1	75 0 0	73 10 0	72 0 0
Copper back plate	1	21 0 0	20 10 0	20 0 0
Copper rod 1¼″ diameter	400 feet	54 0 0	53 0 0	52 0 0
Roof stays	130	16 0 0	15 10 0	15 0 0
		2,2 3 0 0	...	2,111 10 0

Appendix A.—concld.

Description of Stores.	Quantity.	Rate each delivered F. O. B. in the		
		Port of London.	Port of Liverpool or Birkenhead.	Port of Glasgow.
		£ s. d.	£ s. d.	£ s. d.
Brought forward ...		2,213 0 0		2,111 10 0
Tender.				
Wheels and axles	1 set	135 0 0	130 0 0	125 0 0
Tyres	1 „	41 10 0	39 10 0	37 10 0
Axles	4	35 0 0	33 10 0	32 0 0
Axle boxes with brasses, complete	1 set	42 0 0	41 0 0	40 0 0
Bearing springs	2 sets	66 0 0	64 0 0	62 0 0
Buffers	4	17 0 0	16 10 0	16 0 0
Steam brake gear	1 set	70 0 0	67 10 0	65 0 0
Tender tank, and well plates	1 „	90 0 0	80 0 0	70 0 0
		2,709 10 0	...	2,559 0 0

Appendix B.

Copy of Packing Account, dated 26th April 1886, of S. S. " Clan Macgregor *" showing the measurement and weight of packages containing parts of heavy L class Engine, with spare parts (5'-6" gauge), Makers—Messrs. Neilson and Co., Glasgow.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
6 Pieces	Each consisting of 1 locomotive boiler and frame, boiler with tubes complete, dome seat with bolts and nuts, regulator long rod, 2 clack box seats with studs and nuts, 1 mud collector seat with studs and nuts, steam blower cock seat studs and nuts, 4 sand box seat studs and nuts, fire-box with safety valve seat, studs and nuts, 6 fire-bar carrier brackets, 8 brick arch carrier studs, 8 asphan carrier studs with cotters, 12 wash out plug seat studs and nuts, 2 scum cock seat studs and nuts, regulator stuffing box studs and nuts, 4 glass gauge cock seat studs and nuts, 1 mud door, 12 handrail bracket studs and nuts, 2 sand-box handle studs and nuts, 2 flame plate studs, 14 clothing studs, 1 fire door frame and protection plate, smoke box with door and crossbar, cylinder steam and exhaust pipes, 2 lubricator pipe covers, bolts and nuts, bogie centre covering plate, 5 mud plugs, 1 blower pipe, frame with hornblocks and clips, 2 cylinders with front and hind covers, 2 front clothing covers, 2 top clothing covers, 2 steam chest covers with studs and nuts, 2 valve spindle guides with oil cups, 2 compensating beams and carriers, 2 beam pins and 4 spring link pins, 8 spring hanger carriers and pins, 2 reversing shaft carriers, 4 brake block hanger carriers with cotters and ferrules, 2 slide bar brackets, cast iron platform with brake cylinder and cover, 2 platforms, 2 slide bar covering plates, 2 front fall plates with handles, front buffer plate with buffer guide, hind buffer plate with 8 fall plate screws, 2 expansion clips with bolts and nuts, 1 fire-box steadying stay with studs and nuts	25 9 9 6 9 1	20 17 2 0	
6 „	Each consisting of 1 bogie frame with centre and pin, beams and springs	7 9 5 2 2 4	1 18 0 0	
6 „	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 2 3 0 3 0	1 1 0 0	
6 „	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 3 3 0 3 0	1 1 0 0	
6 „	Each consisting of 1 pair of leading wheels on axle, with crank pins, complete	7 2 4 5 4 5	2 12 2 0	
6 „	Each consisting of 1 pair of driving wheels on axle, with crank pins and eccentric pulleys, complete ...	8 0 4 5 4 5	2 16 2 0	
6 „	Each consisting of 1 pair of trailing wheels on axle, with crank pins, complete	7 2 4 5 4 5	2 12 2 0	
6 „	Each consisting of 1 cowcatcher with blow-off pipe guide ...	9 1 3 1 3 8	0 4 0 0	
	Carried over ...	... ...	33 3 0 0	

Appendix A.—concld.

Description of Stores.	Quantity.	Rate each delivered F. O. B. in the Port of London.	Port of Liverpool or Birkenhead.	Port of Glasgow.
		£ s. d.	£ s. d.	£ s. d.
Brought forward ...		2,213 0 0		2,111 10 0
Tender.				
Wheels and axles	1 set	135 0 0	130 0 0	125 0 0
Tyres	1= ,,	41 10 0	39 10 0	37 10 0
Axles	4	35 0 0	33 10 0	32 0 0
Axle boxes with brasses, complete	1 set	42 0 0	41 0 0	40 0 0
Bearing springs	2 sets	66 0 0	64 0 0	62 0 0
Buffers	4	17 0 0	16 10 0	16 0 0
Steam brake gear	1 set	70 0 0	67 10 0	65 0 0
Tender tank, and well plates	1 ,,	90 0 0	80 0 0	70 0 0
		2 709 10 0	...	2,559 0 0

Appendix B.

Copy of Packing Account, dated 26th April 1886, of S. S. " Clan Macgregor *" showing the measurement and weight of packages containing parts of heavy L class Engine, with spare parts (5'-6" gauge), Makers—Messrs. Neilson and Co., Glasgow.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
6 Pieces	Each consisting of 1 locomotive boiler and frame, boiler with tubes complete, dome seat with bolts and nuts, regulator long rod, 2 clack box seats with studs and nuts, 1 mud collector seat with studs and nuts, steam blower cock seat studs and nuts, 4 sand box seat studs and nuts, fire-box with safety valve seat, studs and nuts, 6 fire-bar carrier brackets, 8 brick arch carrier studs, 8 asphan carrier studs with cotters, 12 wash out plug seat studs and nuts, 2 scum cock seat studs and nuts, regulator stuffing box studs and nuts, 4 glass gauge cock seat studs and nuts, 1 mud door, 12 handrail bracket studs and nuts, 2 sand-box handle studs and nuts, 2 flame plate studs, 14 clothing studs, 1 fire door frame and protection plate, smoke box with door and crossbar, cylinder steam and exhaust pipes, 2 lubricator pipe covers, bolts and nuts, bogie centre covering plate, 5 mud plugs, 1 blower pipe, frame with hornblocks and clips, 2 cylinders with front and hind covers, 2 front clothing covers, 2 top clothing covers, 2 steam chest covers with studs and nuts, 2 valve spindle guides with oil cups, 2 compensating beams and carriers, 2 beam pins and 4 spring link pins, 8 spring hanger carriers and pins, 2 reversing shaft carriers, 4 brake block hanger carriers with cotters and ferrules, 2 slide bar brackets, cast iron platform with brake cylinder and cover, 2 platforms, 2 slide bar covering plates, 2 front fall plates with handles, front buffer plate with buffer guide, hind buffer plate with 8 fall plate screws, 2 expansion clips with bolts and nuts, 1 fire-box steadying stay with studs and nuts	25 9 9 6 9 1	... ...	20 17 2 0
6 ,,	Each consisting of 1 bogie frame with centre and pin, beams and springs	7 9 5 2 2 4	... ...	1 18 0 0
6 ,,	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 3 3 0 3 0	... ...	1 1 0 0
6 ,,	Each consisting of 1 pair of bogie wheels on axle, complete ...	6 3 3 0 3 0	... ...	1 1 0 0
6 ,,	Each consisting of 1 pair of leading wheels on axle, with crank pins, complete	7 2 4 5 4 5	... ...	2 12 2 0
6 ,,	Each consisting of 1 pair of driving wheels on axle, with crank pins and eccentric pulleys, complete ...	8 0 4 5 4 5	... ...	2 16 2 0
6 ,,	Each consisting of 1 pair of trailing wheels on axle, with crank pins, complete	7 2 4 5 4 5	... ...	2 12 2 0
6 ,,	Each consisting of 1 cowcatcher with blow-off pipe guide ...	9 1 3 1 3 8	... ...	0 4 0 0
	Carried over ...	... ...	... ...	33 3 0 0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	33	3	0	0
6 Pieces	Each consisting of 1 ashpan with ash dropper door frame, and 4 carriers for ashpan perforated doors, 1 bracket for brake releasing springs, 2 jet pipe clips and screws	6	1	4	8	1	10	...	...	...	...	0	4	2	0
6 Cases	Each containing 1 head lamp, 2 side lamps, 2 hand lamps, 1 cab roof lamp, 1 motion lamp, 2 gauge lamps, 1 gong with seat, bolts and nuts, 1 oil bottle, 1 oil can, 1 oil feeder, 1 pressure gauge with cock and pipe, 4 cab window glasses, 2 gauge glasses and india-rubber washers, 1 hank of worsted and copper wire, 1 parcel split and taper pins ...	4	5	2	5	2	5	...	...	...	...	0	2	2	0
6 „	Each containing 2 connecting rods complete, 4 coupling rods complete, 2 valve connecting rods and 4 pins, 2 slide bars	8	8	2	5	1	9	...	...	...	...	1	0	0	0
6 „	Each containing 1 reversing shaft with levers and 2 pins, 2 reversing links, 2 reversing dies, 1 reversing handle and spring catch, 1 reversing sector and plate with pin, bolts, and nuts, 4 eccentric straps and rods with pins, 4 lifting links, 2 swing links and 2 pins, 2 swing link carriers, 2 slide valves, 2 slide valve buckles, 2 valve spindles and 8 brass nuts, 2 pistons and rods, 2 cross-heads, 2 pins, 2 cotters, 4 slide bar bolts and nuts, 4 slide bar set screws, 2 glass gauge lampholders, 1 motion lampholder, 2 sand pipe guides, 1 sand box rod guide, 2 steam blower rod guides, 6 boiler handrail pillars, 2 cab handrail pillars with bolts and nuts, 2 cab roof supports with cotters, bolts and nuts, 2 injector feed-cock spindles and wheels, 2 injector overflow cock spindles and handles, 2 injector steam-cock spindles and handles, 1 whistle steam-cock spindle and handle, 1 regulator handle, 2 smoke box door handles and pin, 1 smoke box door handrail and 2 pillars, 16 gland nuts, 1 ashpan jet-cock spindle and handle	6	3	3	6	2	1	...	...	...	...	1	8	0	0
6 „	Each containing 1 cab roof complete, 2 cab roof gusset stays, 1 R. H. cab side with tool box and name-plate, 1 L. H. cab side with name-plate, 2 footsteps and 2 stays, with clips for overflow pipes, bolts and nuts, 1 complete set of bolts and nuts for cab	9	8	5	7	2	2	...	...	...	...	0	18	2	0
6 „	Each containing 5 fire-box clothing sheets, 8 boiler clothing sheets, 2 cylinder clothing sheets, 1 dome cover, 1 set of (3) fire-box beadings, 1 cab roof lamp cover, 1 dome with wood lagging, 11 clothing straps with bolts and nuts, 20 pieces crinoline clothing hoops, 2 expansion clip covers, 1 regulator baffle plate, 2 bogie wheel splashers, 1 parcel clothing screws ...	5	10	5	6	5	3	...	...	...	...	1	4	2	0
	Carried over ...	...	...	...	...	...	...	...	...	...	...	38	1	0	0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	38	1	0	0
6 Cases	Each containing 1 chimney with bolts and nuts complete, 1 spark arrester, 1 head-lamp carrier with studs, 2 side-lamp holders with bolts and nuts, 2 front buffers with wood liners, bolts and nuts, 2 balance blocks with bolts and nuts, 1 set of (58) fire bars, 1 centre and 2 end fire bar carriers, 1 fire door with chain, 1 deflector plate, 1 flame plate, 1 coal shovel, 2 ashpan damper doors and 4 carriers, 2 ashpan perforated doors, 1 ashpan sector with bolts and nuts, 1 ash dropper door in 2 pieces, 1 ash dropper door handle and 5 rods, 1 ash dropper bell crank and carrier ...	6	7	2	11	2	11	...	...	...	...	1	8	3	0
6 „	Each containing 1 sand box with valves and levers, 2 sand box saddle brackets with studs and nuts, 2 ball and socket and unions for engine, 2 injectors with feed and overflow cocks and 1 ashpan jet cock, 3 injector steam cocks, 4 glass gauge cocks, 2 clack boxes with bolts and nuts complete, 1 steam brake cock and handle, 1 scum cock and handle, 1 blow-off cock, 1 steam blower cock and seat, 4 cylinder water cocks and levers, 2 steam chest cocks and levers with pipes and clips, 1 regulator stuffing box and gland with studs and nuts, 1 regulator rod end with nuts and washer, 2 piston glands and 2 collar bushes, 2 valve spindle glands, 2 cylinder lubricators, 2 steam chest lubricators and pipes 4 bogie oil cups, 6 oilboxes and pipes for axle boxes, 1 whistle complete, 6 wash-out plugs and cups, 14 mud plugs, 4 slide bar lines, 2 screws for cylinder covers, 6 handrail pillar sockets for boiler, 1 steam blower rod guide seat, 1 steam brake valve, 1 pipe coupling, 1 sand box handle sector, 1 exhaust pipe tee (extra) ...	3	5	3	5	3	5	...	...	...	...	0	13	1	0
6 „	Each containing 6 bearing springs with 12 hangers and screws, 4 brake blocks with hangers and pins, 1 brake cylinder piston with rod and gland, 1 brake connecting rod with releasing springs and eye bolts, 1 brake shaft with 2 cotters, 2 brake tie rods with nuts and ferrules, 2 brake adjusting screws and nuts, 1 regulator with valves and short rod, 1 safety valve complete, 1 hind draw bar, 1 front draw bar with volute spring and washer, 1 front draw shackle with hook and links, 1 hind draw pin with cotter, 2 hind draw safety pins with cotters, 1 20-ton traversing screw jack with ratchet and lever	7	5	3	6	2	1	...	...	...	...	1	11	0	0
	Carried over ...	...	...	...	...	...	...	...	...	...	...	41	14	0	0

Appendix B.—contd.

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	41	14	0	0
6 Cases	Each containing 1 set of wood lagging for boiler and cylinders, 2 boiler handrails with 2 pillars and nuts, 1 sand box rod and handle, 1 steam blower rod with lever and handle, 1 reversing rod and 2 pins, 1 fall plate with hinges, 2 handrails with 8 pillars and nuts for tender tank sides, 1 handrail with 2 pillars and nuts for tender tank back end, 2 long brake rods for tender, 2 ashpan rods, 2 ashpan handles, 1 ashpan handle spring box, 1 ashpan intermediate shaft with carrier, 1 cylinder water cock shaft with carriers, bolts and nuts, 1 cylinder water cock handle, 1 long rod and 7 short rods, 1 cylinder water cock rod guide, 1 cylinder water cock rod lever, 1 blow-off cock spindle and handle, 1 blow-off pipe clip, 2 pieces crinoline clothing hoops, 2 feed pipe carriers, 2 feed pipe carrier stays, 4 delivery pipe carriers, 2 injector spindle brackets 2 cowcatcher stays with pins, bolts and nuts, 12 bolts and nuts for cowcatcher to buffer beam, 1 set of pipes consisting of 6 delivery, 4 stays, 2 feed, 2 overflow, 1 blower, 1 scum, 3 steam brake, 2 glass gauge, 2 blow-off, 4 sand, 4 internal steam, and 1 ashpan jet pipe in 3 pieces, 1 union and nuts, 1 set of fire-irons consisting of 1 long shovel, 1 rake, 1 dart, 1 clinker shovel, 1 pricker, 1 tube plug rod, 1 tube brush rod, 1 crowbar														
6 „	Each containing 6 axle boxes with swing links and pins for engine, 6 axle boxes with covers and brasses for tender, 4 axle boxes with covers for engine bogie, 1 bogie centre pivot with bolts and nuts, 1 bogie centre pivot brass washer, 1 complete set of 16 screw keys, 1 large and 1 small monkey wrench, 1 hand, 1 heavy, 1 lead, and 1 copper hammer, 6 files and 3 handles, 6 chisels, 1 cotter punch, 1 large and 1 small pin punch, 1 footplate brush, 1 tube scraper, 1 tube brush, 5 padlocks and keys	16	11	2	3	2	4	...	...	...	...	6	16	3	0
6 „	Each containing (Tender Details) 6 bearing springs, 12 spring hangers and 12 pins, 6 bearing spring pillars, 2 hind buffers complete, 1 hind draw hook with shackle, volute spring, and washer, 2 hind draw chains and hooks, 2 front safety links, 2 front safety pins and cotters, 6 brake blocks and hangers, 6 brake hanger pins, 1 brake shaft, 3 brake tie rods and washers, 2 brake rods and 2 pins, 1 brake screw with rod and handle, 1 brake screw pillar with bolts and nuts, 2 copper feed pipes with bolts and nuts, 2 ball and socket union pipes and feed cocks with bolts and nuts, 2 feed cock spindles and handles with levers and guides, bolts and														
	Carried over ...	6	5	2	11	2	2	...	...	...	...	1	9	2	0
		...	...	...	...	...	...	...	...	...	...	44	0	1	0

Appendix B.—concld.

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought over ...	...	...	...	...	...	...	...	...	...	...	44	0	1	0
	nuts, 2 feed pipe hangers and 2 stays, bolts and nuts, 2 handrail pillars with tops and nuts, 2 handrail pillar brackets with bolts and nuts, 4 footsteps and 2 stays with bolts and nuts 2 footstep handles, 2 lamp holders with bolts and nuts, 2 tool box lids, 1 name plate, 1 water gauge pipe top, 1 set of (6) footboard jointing plates with bolts and nuts	7	11	3	2	2	8	...	...	...	...	1	16	3	0
6 Cases	Each containing 1 cab roof for tender complete, 2 cab sides with bolts and nuts, 1 cab back plate with bolts and nuts, 2 cab roof brackets with bolts and nuts, 4 cab roof pillars with bolts and nuts, 14 footboard carriers, bolts and nuts	9	7	5	3	1	5	...	...	...	...	0	12	0	0
6 Pieces	Each consisting of 1 tender tank with sides and lid, hind lamp platforms, 16 wood pillar brackets, 1 hind and 2 front tool boxes, 4 lifting plates, "foot well" packed in manhole of tank, water gauge pipe packed in hind tool box ...	15	4	9	6	6	6	...	...	...	...	3	17	0	0
6 „	Each consisting of 1 tender frame with brackets and clips, 6 brake hanger carriers, 2 brake shaft carriers, 12 spring hanger brackets, 6 spring pillar guides, 1 front intermediate spring with draw pin and cotter, 2 intermediate buffers with shoes, hind buffer plate with draw hook guide, bolts and nuts for tank to frame	15	10	9	6	3	3	...	...	...	...	3	16	2	0
6 „	Each consisting of 1 pair of leading tender wheels on axle, complete ...	6	2	3	10	3	10	...	...	...	...	1	8	3	0
6 „	Each consisting of 1 pair of centre tender wheels on axle, complete ...	6	2	3	10	3	10	...	...	...	...	1	8	3	0
*6 „	Each consisting of 1 pair of trailing tender wheels on axle, complete ...	6	2	3	10	3	10	...	...	...	...	1	8	3	0
	Total Gross Weight of 1 heavy L class Engine and Tender ...	...	...	...	...	...	...	...	...	...	...	58	8	3	0

Appendix C.

Copy of Packing Account dated *of S. S.* "Princess Louise" *showing measurement and weight of packages containing parts of E class engine, (metre gauge): Makers—Vulcan Foundry Co.*

Description and number of packages.	* Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
1 Piece	Each consisting of one Locomotive Boiler with 1 set of brass tubes in place, dome seat, bottom part of regulator pipe, regulator rod and small lever, safety valve seating, 2 clack box seats, mud collector 1 cover and all studs, smoke box with door and cross bar, 2 steam pipes, 1 T pipe and main steam pipe in boiler, 1 exhaust pipe in parts and 6 brass mud plugs in tube plate. Fire box with three mud doors in place and 2 carriers for fire bars; studs on fire-box for mountings and cleading sheets, also studs for safety valve pillar, 9 longitudinal stays and 2 copper steam pipes in boiler, 2 expansion stay angle irons. Frame with horn blocks and stays complete, leading and driving spring link carriers and trailing spring with carriers complete, 2 angle irons for reversing shaft brackets; 1 C. Iron footplate, back buffer plate, 2 side bar brackets, 2 platform supports, 2 footstep plates and stays, platforms, front buffer beam, 1 draw box and India rubber washers, 1 pair cylinders and covers cased with wood and iron sheeting ...	18	9	7	0	6	9	22	6	1	0	22	16	3	0
1 „	Each consisting of 1 pair leading wheels on axle with crank pins and journals cased with wood ...	4	6	3	2	3	2	2	13	0	10	2	13	1	6
1 „	Each consisting of 1 pair driving wheels on axle with crank pins and journals cased with wood ...	5	4	3	2	3	2	2	13	1	0	2	13	2	8
1 Case	Each lined with tin, containing 2 connecting and 2 coupling rods complete, 2 slide bars with 2 liners and bolts, 4 eccentric rods and 2 pins, 4 eccentric sheaves complete and 4 eccentric straps and bolts, 1 pump rod, eccentric sheave with straps and bolts complete, 1 reversing shaft and 2 pins, 1 C. I. balance weight and pin, 2 brackets for reversing shaft complete, 4 lifting links and 2 pins, expansion links, 2 valve rods and 2 pins, 2 valve spindles and 8 brass nuts, 4 small spring pillars, 1 regulator handle, 2 cross heads, and brasses complete, 2 pistons and rods, 2 spindles and 2 handles for injector, 1 whistle rod and 2 brass washers, 1 dart with 2 handles for smoke box door, 4 handrail brackets and 4 sockets, 2 small brackets and 2 nuts, 2 hand rail pillars and 2 nuts, 1 cylinder cock shaft, 3 levers and 3 pins, 2 short and 2 long links, 1 spindle and 2 levers, 1 safety valve pillar with spiral spring, valves, lever and links complete,	3	11	2	3	2	3	1	5	1	13	1	5	2	0
	Carred over ...	...	...	...	...	...	...	...	...	...	...	29	9	0	14

Appendix C.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...	...	...	...	...	...	...	...	...	...	29	9	0	14
	1 small carrier for blower pipe, 1 small neck regulator pipe, spring and bolts and brass valve, 1 short stroke pump ram, air vessel, brass gland and bolts complete, 1 rod for regulator valve and 2 pins ...	7	1	2	10	2	1½	3	7	1	16	3	17	0	1
1 Case	Each containing 1 ashpan with doors complete, and 1 small lever, 26 bolts and nuts for dome flange, 1 dome and stud, 21 W. iron fire bars, 4 W. iron splashers and bolts, 1 fire door complete, 1 central buffer and draw bar, chain and pin, 2 leading and 2 driving springs, 8 spring links, 1 draw pin and 2 safety pins, 1 rod for ashpan, 2 life guards and 4 bolts, 2 footsteps and 8 bolts, 1 baffle plate and 2 set screws, 8 set screws and washers for cleading sheets ...	5	6	3	1½	2	4	2	10	1	21	2	19	1	4
1 „	Each lined with tin containing 2 brass slide valves, 2 buckles and 4 springs, 2 valve rod guides, 2 set screws and 8 bolts, 2 brass clack boxes with 12 bolts, 2 brass ball and socket pins, 2 brackets and bolts, 1 stuffing box and gland, 2 studs and centre spindles for regulator rod, 1 Friedman's injector, 2 small cocks, and 2 brackets and bolts, 2 piston rod glands and bushes, 4 valve spindle glands and 4 bushes, 2 sand-box valves, 2 flanges, 2 bell crank levers and 2 pins, 4 brass piston rings, 2 Roscoe's lubricators, 2 Furness lubricators, 1 whistle, nut and lever, 2 brass mud plugs and seats, 2 glass gauge cocks, 2 seats and 2 coupling nuts, 2 water cocks and 2 seats, 4 cylinders and 2 steam chest cocks and 6 levers and pins, 4 brass syphons and 4 small copper pipes and 2 brackets for valve spindles and piston rods, 6 brass mud plugs, 1 brass elbow and nut for jet pipe, 1 mud cock, 1 small bracket, 1 lever and handle complete, 2 straight pipes for inside of dome, 3 W. iron clips and 6 bolts for mud pipe pump and injector delivery pipe, 3 copper lubricating pipes and 6 brass nuts, 2 C. iron shells for protecting small lubricating pipes, 1 steam cock for injector and spindle, 1 blower cock and spindle	4	0	2	1	1	10½	0	15	2	25	1	1	1	14
1 „	Each containing 1 dome, 3 parts of mounting and 2 copper pipes for back of fire-box, 1 sheet for back plate of fire-box, 8 sheets for barrel and fire-box, 3 belts for barrel and fire-box belts with 5 bolts, 1 set of crinoline rings, 4 straight pieces, 2 bent strips and 2 angle pieces for corners of fire-box, 1 cylinder mounting for safety valve seat ...	3	5	3	5	4	5	0	14	1	3	1	3	1	9
1 „	Each containing wood lagging for boiler, fire-box and dome barrel, 2 long handrails, 1 rod for cylinder cock gear, 2 C. Iron sand-boxes														
	Carried over ...	...	...	...	...	...	...	...	...	...	...	38	10	0	14

Appendix C.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...	...	...	...	...	..	...	...	...	...	38	10	0	14
	and bolts, with 2 brass name-plates on, 1 blower pipe with 2 brass nuts, 1 long tube cleaner, 1 pet cock rod, 3 sand box rods, 1 cylinder cock rod, 1 pipe for mud cock, 2 injector steam pipes with 2 brass nuts, 3 suction and delivery pipes and 4 bolts, 1 funnel and pipe, 1 pipe for glass gauge cock, 2 pump suction pipes and one brass nut, 1 pump delivery pipe, pet cock, small pipe and lever, 2 sand pipes 4 brackets and 6 bolts, 1 long reversing rod and 2 pins, 2 long reversing links for tender brake ...	14	7½	1	11	1	10	1	3	0	26	1	14	0	17
1 Case	Each containing cab roof lined with wood, 2 cab fish plates, 2 sides of cab and one front plate, 4, ⅜" bolts, 22, ½" bolts and 6, ⅝" bolts for bolting cab to platform, 75, ⅜" bolts for sides and roof of cab, 2 cab doors, 1 small case containing 4 brass rings for eye glasses, 2 brass knobs and 2 handles, 4 small brass handles, and 4 swivels for eye-glass frames, 1 small case containing 4 eye-glasses, 1 smoke box mounting and 7 pieces of teak for covering engine footplate	7	11	7	7	1	11	1	12	1	21	2	12	3	26
1 „	Each containing 1 chimney and bolts, 1 plate and 4 bolts for carrying lamp, 2 leading, 2 driving, and 2 trailing axle boxes complete, 2 sliding covers for trailing axle boxes, 4 thin W. Iron covers for axle boxes, 1 ten-ton traversing screw-jack and bottom handle, 1 longitudinal strip and all screws for crinoline bolts, 1 sector plate and quadrant, 3 small levers and 2 bolts complete, 1 reversing sector plate and quadrant, lever and bolts complete, 1 fall plate, 2 hinges and 4 set screws. Tools :—1 rake, 1 dart, 1 pricker, 1 clinker shovel, 1 long and 1 short shovel, 1 tube plugging iron, 1 long pinch bar, 6 single spanners, 1⅝", 1½", 1¼", ⅞", ¾", and $\frac{5}{16}$"ths 4 double spanners, 1¼" and 1⅛," 1" and ⅞," ¾ and ⅝," ½" and ⅜", 2 flat and 1 cross cut chisel, 1 cotter drift, and 2 pin punches, 1 copper and 1 tin hammer, 1 hand and 1 quarter hammer, 2 monkey wrenches, 10 and 14 inches 2 flat files, 14 and 15 inches bastard, 1-14 inch half round bastard and 1 round bastard, 1 hand brush, 1 half gallon oil can, 1 long oil feeder and 1 pint oil can ...	7	6	3	0¾	2	3½	1	18	3	1	2	9	0	20
1 „	Each lined with tin, containing 1 head lamp and brackets and bolts, 2 side lamps with red lights, 2 brackets and 4 bolts, 2 hand lamps, 2 gauge lamps and 1 small bracket ; 1 small case containing 1 pressure gauge, 1 pipe and 2 nuts, 14 spare gauge glasses, and 28 india rubber rings ...	3	7½	3	1½	2	3	0	2	3	16	0	10	0	23
	Carried over ...	...	...	...	...	...	...	...	...	...	...	45	16	2	16

Appendix C.—*concld.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft	In.	Tons.	Cwt.	Qrs.	lbs.	Ft.	In.	Cwt.	Qrs. lbs.
	Brought forward ...			.....					.....			45	16	2	16
1 Piece	Each consisting of 1 tender frame and tank, 2 tool boxes in front and 2 tool boxes at back, with brass name plate I. S. R. 2 buffer boxes, 1 water feed tank, 25 stanchion brackets on sides and back of tank, 6 horn stays, 2 foot-step stays, 12 spring shoes, 12 horn blocks cased with wood, 1 draw spring and pin, 2 brackets for brake shaft, 1 lamp carrier at back of tank, tank crated with wood ...	16	4	7	0	5	8	11	3	1	13	11	13	1	0
3 Pieces	Each consisting of 1 pair tender wheels on axle, journals being cased with wood ...	5	5	2	3	2	3	3	17	1	12	3	17	3	4
1 case	Each containing 1 brake pillar with 6 bolts, 6 brake hangers and blocks, 6 top pins and 12 collars, 1 brake screw and handle, 3 brake links and pins, 3 cross shafts with all collars and pins, (2 long brake links in engine case No. 9), 1 brake shaft, 2 buffers plungers and shoes, 2 safety links and 2 pins, 1 draw bar, 2 foot-steps and 8 bolts, and 2 stays and 4 bolts, 3 plates for draw box, and 16 bolts, 1 guide for draw bar and 2 bolts, 1 central buffer, 1 draw bar, pin, cotter and chain, 2 plates, 1 nut and 1 volute spring complete, 2 brass feed cocks, and 8 bolts, 2 brass elbows, 2 brass ball and socket pipes, 2 clips, chains and bolts, 6 tender springs, 12 steel spring shoes, 6 axle boxes, with brasses complete, 2 sliding covers for middle axle boxes, 2 handrail pillars, 2 brackets and 4 bolts, 2 spindles, 2 handles and 2 small guides for feed cocks, 1 strainer for tank and 1 lid, 6 carriers and tin bolts for tender platform, and 2 padlocks with different keys	7	8	2	6	2	3	3	1	0	17	3	11	0	13
	Total Gross weight of one E class Engine and Tender ...			.....					.....			64	18	3	5

Appendix D.

Copy of Packing Account, dated 25th June 1887, of the S. S. "Amarapoora" shewing measurement and weight of packages containing parts of O class Engines (Metre Gauge): Makers—Messrs. Neilson and Co., Glasgow.

Description and number of packages.	Description of Stores, showing Contentsof Packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
5 Pieces	Each consisting of 1 Locomotive boiler and frame, boiler with tubes regulator pipe and valves, with short rod and pins, regulator long rod and carrier, internal steam pipe and clips, 2 internal steam pipes and couplings for injectors, 1 ditto for steam blower, dome and top with bolts and nuts, 2 clack box seatings, 10 studs and nuts, 1 mud collector cock seating, studs and nuts, 2 clothings studs in dome, 2 handrail pillar brackets, studs and nuts, 1 manhole cover, bolts and nuts, fire-box with vertical and horizontal stays and nuts, 1 safety valve seating, studs and nuts, 8 injector steam cock studs and nuts, 2 steam blower cock studs and nuts, 4 studs for injector, steam blower and whistle spindle guides, 12 studs and nuts for wash-out plug seats, 2 expansion brackets, 13 clothing studs, 4 clothing brackets with 8 studs and nuts, 4 mud plug seatings, 2 mud doors, 8 glass gauge cock studs and nuts, 1 glass gauge lampholder seat, studs and nuts, 4 blow off cock studs and nuts, 4 regulator stuffing box studs and nuts, 1 steam brake cock seating, studs and nuts, 1 fire door frame, 1 catch and 6 studs and nuts, 2 flame plate studs and pins, 2 scum cock studs and nuts, 2 centre fire bar carrier brackets, 4 studs and nuts, front and hind fire bar carrier studs, 2 fusible plugs, 6 studs for brick arch, 8 studs and 8 cotters for ashpan to bottom ring, smoke box with door, hinges and pin, and cross bar with carriers, 2 cylinder steam pipes, 1 steam T. pipe, bolts and nuts, exhaust steam pipe and top, studs and nuts, 1 steam blower pipe and 2 coupling nuts, 2 lubricator pipe covers, bolts and nuts, 1 stay for blast pipe, 5 mud plugs, 2 angle irons for smoke box bottom, 12 set screws. Frame, with 2 cylinders front and hind covers, 2 steam chest covers, studs and nuts, 2 valve spindle pocket glands, bogie centre casting, bolts and nuts, and bogie centre pin with nut and washer, 1 front buffer beam, 1 buffer box and guide with volute spring and washers, bolts and nuts, 4 axle box guides and 4 clips with 8 studs and nuts, 2 compensating lever brackets, 12 bolts and nuts, 2 pins and washers, 4 spring link brackets, 2 expansion brackets and clips, bolts and nuts, 8 brackets and set screws for splashers, 2 footstep plates, 4 rocking shaft carriers, bolts and nuts, 2 reversing shaft carriers, bolts and nuts, 2 slide bar brackets 4 piston			
	Carried over ...	.....	.....	.....

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
	Brought over ...	.....	.....	.....
	rod gland studs, 8 fall plate screws, 2 bushes and 4 bolts and nuts for cylinder water cock shaft, 1 motion lampholder, 4 brake block hanger bracket, 3 cross stretchers, 2 platform plates and cast iron foot plate	22 5 7 7 8 9	.....	11 2 0 0
5 Pieces	Each consisting of 1 pair of bogie wheels on axle complete ...	3 10 2 7 2 7	.....	0 10 0 0
5 „	Each consisting of 1 pair of bogie wheels on axle complete ...	3 10 2 7 2 7	.....	0 10 0 0
5 „	Each consisting of 1 bogie frame, with 8 axle box guides, 4 born clips, 8 studs and nuts, 2 spring beams, 2 springs, 4 spring links and pins, 2 tierods, 1 bogie centre, 1 centre slide, 2 carriers and steel check springs	5 11 2 11 1 10	.....	0 17 2 0
5 „	Each consisting of 1 pair driving wheels on axle, with 4 eccentric pulleys, 2 crank arms, 2 crank pins and nuts, and balance weight complete	7 0 4 7 4 7	.....	1 14 0 0
5 „	Each consisting of 1 pair trailing wheels on axle, with 2 crank arms, 2 crank pins and nuts, and balance weights complete	7 0 4 7 4 7	.....	1 11 1 0
5 „	Each consisting of 1 cowcatcher ...	7 0 2 6 2 6	.....	0 2 2 0
5 „	Each consisting of 1 ashpan ...	5 0 2 9 1 11	.....	0 3 1 0
5 Cases	Each containing 2 connecting rods with 4 pairs brasses, 2 large cotters, with split cotters, 4 oil cup covers, 4 sets screws, 2 check blocks, and 2 bolts and washers, 2 coupling rods with 4 brass bushes and 4 oil cup covers, 4 eccentric straps and 4 rods with pins complete, 1 reversing shaft with lifting link pin and washer, 2 slide valves, 2 valve spindles and buckles, 2 crossheads and 2 cotters, 2 valve spindle gland stuffing boxes and 4 studs, 2 valve connecting rods and 2 pins, 2 pistons and rods with packing rings, brass nuts and split cotters, 2 piston crossheads with 4 brass slide block liners, 12 bolts and 24 nuts, 2 oil cup covers, 4 studs and nuts, 2 piston crosshead pins with nuts and washers, 2 piston crosshead cotters with split cotters, 2 expansion links with 2 brackets, 2 lifting link studs and washers, 2 oil cups and 2 dies, 2 lifting links, 2 rocking shafts and 4 pins, 2 slide bars and 4 liners, 6 slide bar bolts and nuts, 1 regulator handle, 1 regulator handle socket with nut and washer,			
	Carried over ...	.....	.....	16 10 2 0

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of Packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						...				16	10	2	0
	1 smoke box handrail and 2 studs with nuts and washers, 2 smoke box door handles and pin, 2 injector steam cock spindles, 2 handles, 2 guides, 1 whistle cock spindle, 1 handle and 1 guide, 1 blower cock spindle, 1 handle and 1 guide, 1 mud collector cock handle with guide, bolts and nuts, 2 injector feed cock spindles and handles, 2 injector overflow cock spindles and handles, 2 hand rail pillars with knobs and nuts for cab, 1 set of (16) piston and valve spindle gland nuts, 1 ashpan jet cock spindle and handle, 1 guide	8	1	3	1	2	1	.....				1	6	1	0
5 Cases	Each containing 10 clothing plates for boiler and fire box, 1 fire box face plate and one piece wood lagging for ditto, 1 dome clothing cover and 1 piece wood lagging for dome, 1 set of (3) fire box beadings, 2 cylinder clothing plates, 1 set of (8) clothing straps, 1 set of (23) crinoline hoops and bands, 1 cab roof lamp cover, 1 parcel screws and pins for boiler and cylinder clothing, and 1 stud and pin for dome top	4	3	4	3	5	2	.....				0	11	2	0
5 „	Each containing 1 right hand cab side with tool box and lid, hasp and eye bolt, hinges, bolts, and nuts, 13 bolts and nuts to foot plate, 5 bolts and nuts to roof, 12 bolts and nuts to front, 1 left hand cab side, with 12 bolts and nuts to front, 13 bolts and nuts to foot plate, and 5 bolts and nuts to roof, 1 cab front with two doors and hinges, 2 handles, 4 brass window frames, 6 bolts and nuts to footplate, 7 bolts and nuts to roof, 1 cab with 14 bolts and nuts for front to roof, 2 cab stays, bolts and nuts, 1 teak wood platform for engineman's footplate, 1 small box containing 4 spectacle glasses, 2 gauge glasses and washers, 1 pressure gauge and pipe, 1 hank of worsted and copper wire for syphons	8	0	6	7	2	1	.....				0	17	0	0
5 „	Each containing 1 chimney with bolts and nuts, 1 spark arrestor, 2 sand boxes with 2 lids, 2 chains, 2 valves, 2 bushes, 2 levers, 3 pins, 4 bolts and nuts, 1 head lamp carrier with 4 studs and 4 screws, 2 side lamp holders with 4 bolts and nuts, 1 central buffer with pin, nuts and washers, 1 draw hook, 1 draw pin, 2 safety pins, 1 draw bar, 1 reversing screw bracket with hand wheel and handles, 1 key, 1 screw, 1 die, 1 stud, 2 nuts, 1 index plate and 2 screws, 1 indicator, 1 mall-iron carrier for reversing screw bracket, with 8 bolts and nuts, 1 safety valve seat, with valves, lever, and spring complete, 1 fire door and chain, 1 fire door defector plate, 1 fire door frame-plate, 1 ashpan perforated door, 1 ashpan damper door, with lever and carriers, 2 ash dropper doors, with														
	Carried over ...	.....						.....				19	5	1	0

Appendix D.—*contd.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						.....				19	5	1	0
	gearing complete, 1 sector and stud, with 2 washers and 3 bolts and nuts for cylinder, sand and damper rod handles, 1 cylinder water cock handle, 1 sand rod handle, 1 ashpan rod and handle with pins, 2 cowcatcher stays with 8 bolts and nuts, 13 bolts and nuts for cowcatcher to buffer beam, 1 10-ton traversing screw jack with ratchet and lever, 1 set of (16 sizes) screw keys, 1 large and 1 small monkey wrench (7 in. and 14 in.), 1 copper, 1 lead, 1 quarter and 1 hand hammer, 2 flat, 2 round, and 2 cross-cut chisels, 2 pin punches ($\frac{1}{8}$ in. and $\frac{1}{4}$ in.), 1 cotter punch, 1 hand brush, 6 files and 3 handles, 1 tube scraper, 1 tube brush, 1 crowbar, 1 pricker, 1 dart, 1 rake, 1 tube brush rod, 1 tube plug holder, 1 long shovel, 1 short, shovel, 5 padlocks and keys, 1 slice, 2 foot-steps, bolts and nuts ...	7	1	3	5	2	5	.....				1	1	0	0
5 Cases	Each containing 1 steam brake cylinder, with piston and brass packing, 1 rod, 1 crosshead and pin, 1 relief valve, 1 gland, 2 studs and 4 nuts, 4 brake blocks with hangers, 4 springs, 4 pins, and 8 set screws, 4 pins, and ferrules, 2 brake tie rods, 1 shackle and 2 pins, 2 brake coupling rods, 1 shackle, 3 pins, 2 eye bolts and 2 springs, 4 engine bearing springs and 8 pins, 8 spring links and 8 pins, 2 compensating beams, 1 set of (22) single fire bars, 4 side fire bars, 1 centre fire bar carrier, 1 front and 1 hind carrier, 2 reversing shaft balance weights with 2 bolts and nuts ...	6	5	2	5	2	1	.....				1	3	1	0
5 „	Each containing 2 bogie, 2 driving, and 2 trailing wheel splashers, with bolts and nuts, 2 driving crank splashers, 2 steam chest cover caseings, 2 injectors, with feed and overflowcocks and ashpan jet cock, 8 bolts for delivery pipes, 8 studs for injector steam pipes, and 4 bolts for suction pipes, 2 injector feed cock hangers and two stays, 8 bolts and nuts, 2 ball and socket pipes, with hangers for engine, 2 clack boxes, with 8 bolts and nuts, 2 blow-off cocks, 1 mud collector cock, 1 steam blower cock, 2 injector steam cocks, 1 scum cock and handle, 1 steam brake cock with handle, sector and elbow bracket, 4 glass gauge cocks and seatings, 1 whistle with cock and seating, 2 piston glands and 2 bushes in 4 pieces, 2 valve spindle glands and 2 bushes, 1 union for outside blower pipe, 14 mud plugs, 6 wash-out plugs and nuts, 2 Roscoe's lubricators for steam pipes, 2 Furness' lubricators for cylinders, 1 regulator stuffing box and gland with studs and nuts, 6 cylinder water cocks with levers and pins, 2 piston rod oil cups, 2														
	Carried over ...	.....						.....				21	9	2	0

Appendix D.—*contd.*

Description and number of ackages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	...		...		...		...				21	9	2	0
	valve spindle oil cups, 2 bogie centre oil cups, 1 pressure gauge cock, 1 glass gauge lampholder, 1 blast pipe top (spare), 1 blower pipe guide, 2 injector feed and over-flow spindle guides, bolts and nuts, 1 cylinder water cock rod guide, bolts and nuts, 2 mud discharge pipe guides	6	8	2	7	1	5	...	...	...	...	0	11	0	0
5 Cases	Each containing 1 set of wood lagging for boiler, fire box and cylinders 2 injector delivery pipes in 6 pieces, 2 coupling nuts and 8 bolts and nuts, 2 injector steam pipes in 6 pieces and 6 coupling nuts, 2 injector suction pipes, 1 outside blower pipe and 2 coupling nuts, 2 steam brake pipes and 2 coupling nuts, 1 brake exhaust pipe and elbow, 1 scum pipe, 1 mud discharge pipe and coupling nut, 2 glass gauge drip pipes, 2 sand pipes and 4 guides, 4 cylinder lubricator pipes, couplings and nuts, 2 steam chest condensed water pipes, couplings and nuts, 1 ashpan jet pipe in 4 pieces, with couplings and nuts, 1 reversing rod with pin and washer, 2 sand box rods, 2 boiler handrails with 4 studs and 2 nuts for smoke box, 4 tender handrail with eight studs and nuts, 1 cylinder water cock shaft with 3 levers and three pins, 5 cylinder water cock rods, 1 lever and 2 pins, 1 face plate with hinges ...	14	10	2	1	2	0	...	...	...	...	0	12	0	0
5 ,,	Each containing 4 engine axle boxes with brass bushes, 4 spring hanger pins, 8 pins for keeps and 4 covers, 6 tender axle boxes with brasses and iron liners, lids and guard plates, brass plugs and oilhole covers, 6 leather washers, 2 sliding tops for centre axle boxes, 4 bogie axle boxes with covers complete, 2 ashpan damper air doors with two lids, 6 screws, 6 bolts and nuts and 2 hooks ...	4	2	2	8	2	5	...	...	...	...	0	14	1	0
5 ,,	Each containing 1 head lamp, 2 side lamps, 2 gauge lamps, 1 motion lamp, 2 handlamps, 1 cab roof lamp, 1 oil bottle, 1 oil can, 1 oil feeder ...	4	3	2	5	2	0	...	...	...	...	0	3	2	0
5 ,,	Each containing 1 tender cab roof complete, 2 side railings with pillars and coping for tank, 1 hind railing with pillars and coping for tank, 2 cab handrail pillars, 2 brackets and 4 bolts and nuts for tank ...	10	6	5	10	2	0	...	...	...	...	0	16	1	0
	Carried over ...	.....						...				24	6	2	0

Appendix D.—*concld.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.						Net weight.				Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons.	Cwt.	Qrs.	lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						...				24	6	2	0
	to footplate, 4 brake rods and 2 pins, 3 brake tie rods and washers, 1 central buffer with pin, nuts and washers, 1 draw hook, 2 safety pins, 2 safety links, 1 buffer guide, bolts and nuts, 2 life guards, bolts and nuts, 2 foot steps and 16 bolts and nuts, 9 foot board hangers and 38 bolts and nuts, 2 corner binding plates for footboards, 2 feed valve spindles and handles, 2 copper feed pipes, 2 ball and socket feed pipes, and cocks with carrier, bolts and nuts, 1 class O plate, 2 tool box lids with hinges and hasps, 1 gong with wood seat and 3 bolts and nuts to tank, 1 gong cord guide ...	7	9	2	3	2	1	...	...	...	...	0	19	2	0
5 Pieces	Each consisting of 1 tender tank and frame, tank with front and hind tool boxes, lid hasp, eye bolt, and hinges, 14 pillar brackets and 28 bolts and nuts, 10 sockets for railings on tank, 2 shields for water valve spindles, 1 sieve and filling door, 1 bunker door and catch, 2 head lamp platforms, 2 side lamp holders, and 4 lifting plates.														
	Frame with axle box guides and clips, studs and nuts, 12 spring link brackets, 8 spring links and pins (front and hind), 4 tank supports, and 8 bolts and nuts, 1 brake shaft and 2 carriers with bolts and nuts, 1 intermediate buffing spring with draw pin, 2 intermediate buffers with shoes and guides, 2 cisterns with bolts and nuts, 1 water gauge pipe and top, 1 hind buffer plate with buffer box, volute spring and washers ...	13	8	7	5	6	4	...	...	...	...	4	4	0	0
5 ,,	Each consisting of 1 pair of leading tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
5 ,,	Each consisting of 1 pair of centre tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
5 ,,	Each consisting of 1 pair of trailing tender wheels on axle complete ...	5	3	2	7	2	7	...	...	...	...	0	10	1	0
	Total gross weight of 1 O class engine and tender complete ...	...	...	...	...	...	...	...	...	...	...	31	0	3	0

Appendix E.

Copy of Packing Account, dated 6th August 1888 of the S. S. " Amarapoora *" showing measurement and weight of packages containing parts of F Class Engine (Metre Gauge) : Makers—Messrs. Neilson & Co., Glasgow.*

Description and number of packages.	Description of Stores, showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
5 Pieces	Each consisting of 1 locomotive boiler and frame, boiler with tubes complete, internal steam pipe and bottom part of regulator pipe, regulator long rod, dome seating with bolts and nuts, mud collector seat and cover, studs and nuts, 2 clack box seats, studs and nuts, 4 studs and nuts for boiler handrail pillar seats, fire-box with ashpan attached, 6 studs, and nuts for steam brake valve seat, fire door frame, safety valve seat, studs and nuts, 2 studs and nuts for glass gauge lamp-holder seat, 4 clothing brackets, 12 clothing studs, 2 studs and pins for flame plate, 2 fusible plugs, 2 mud doors, 12 studs and nuts for wash-out plug seats, 6 fire bar carrier brackets, 2 back damper doors for ashpan, 4 studs and nuts for blow-off cocks, smoke box with door and crossbar, 4 mud plugs, 1 steam T pipe, 2 cylinder steam pipes, 2 exhaust steam pipes and top, 2 lubricator pipe covers, and bottom covering plate. Frame with hornblocks and clips, 2 cylinders with front and hind covers, 2 steam chest covers, 2 valve spindle stuffing boxes with collar bushes, 2 slide bar brackets, 12 spring hanger brackets, 6 spring pillar guides, 2 reversing shaft carriers, 4 brake block hanger carriers, 3 cross stretchers, 1 front buffer beam, 1 "Timmis" spring and steel case, foot plate with drawbox and two buffing plates, 8 fall plate screws, 2 expansion clips with bolts and nuts, 1 back covering plate for fire box with screws, 1 reversing handle bracket 2 platforms with 4 carriers and 2 foot-step plates, 2 doors with handles for cylinder steam chests, and 2 steam chest pipe clips ...	22 3 7 3 7 2	...	11 0 0 0
5 Pieces.	Each consisting of 1 pair of leading wheels on axle, with outside driving cranks complete	7 0 3 9 3 9	...	1 2 1 0
5 „	Each consisting 1 pair of driving wheels on axle, with outside cranks and eccentric pulleys complete	7 0 3 9 3 9	...	1 6 0 0
5 „	Each consisting of 1 pair of trailing wheels on axle, with outside driving cranks complete	6 6 3 9 3 9	...	1 2 0 0
5 „	Each consisting of one cowcatcher ...	7 0 2 3 2 3	...	0 2 0 0
	Carried over ...	...	...	14 12 1 0

Appendix E.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
		Ft. In. Ft. In. Ft. In.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
	Brought forward ...	... ...	... ...	14 12 1 0
5 Cases	Each containing 1 reversing shaft and 3 pins, 2 connecting rods complete, 4 coupling rods complete, 4 eccentric straps and rods and 2 pins, 2 valve connecting rods and 4 pins, 2 slide valves, 2 valve spindles and buckles with crossheads and cotters, 2 pistons and rods with rings and nuts complete, 2 piston cross heads with brass liners, pins and cotters, 4 swing links with brass bushes, 4 lifting links, 2 reversing links and 2 dies, 1 reversing handle with pin, 1 regulator handle, 1 regulator rod end with nut and washer, 4 motion pins, 2 smoke box door handles and pin, 2 slide bars with 4 bolts and nuts, 2 handrail pillars with tops and nuts, 2 injector feed cock spindles and handles, 2 injector overflow cock spindles and handles, 2 injector steam cock spindles and handles with guides, 1 steam blower cock spindle and handle with guide, 1 steam whistle cock spindle and handle with guide, 1 steam blower pipe guide, 1 glass gauge lampholder with seat, 4 boiler handrail pillars, 2 with seats and 2 with nuts, 1 smoke box door handrail with 2 studs and nuts, 16 gland nuts	6 9 2 10 2 5	...	1 4 2 0
5 „	Each containing 1 cab roof for engine complete, 1 set of (40 pieces) teak wood lagging for boiler, 1 set of (16 pieces) teak wood lagging for cylinders, 1 wood seat for gong, 3 teak wood tool box lids ...	8 0 6 3 2 0	...	0 11 1 0
5 „	Each containing 1 right hand cab side with tool box and name plate, 1 left hand cab side with name plate, 2 cab roof gusset stays, 1 complete set of bolts and nuts for cab, 1 small box containing 4 cab front window glasses, 1 pressure gauge with cock and pipe, 2 gauge glasses with india rubber washers, 1 hank of worsted, 1 hank of copper wire, 1 parcel split and taper pins ...	8 2 6 1 1 10	...	0 12 0 0
5 „	Each containing 9 boiler and fire box clothing sheets, 6 clothing straps, bolts and nuts, 1 set of (18 pieces) boiler crinoline hoops, 1 dome, 1 dome clothing cover, 2 cylinder clothing sheets, 3 pieces fire box beading, 1 parcel clothing screws, 1 regulator baffle plate	4 8 4 8 5 7	...	0 14 0 0
5 „	Each containing 1 chimney with bolts complete, 1 spark arrestor, 2 sand boxes with valves, levers and number plates (N and C.), 1 duplex safety valve complete, 1 reversing sector and plate, bolts and nuts, 1 regulator pipe and valve with short rod and 2 pins, 1 cylinder water cock and sand box sector and pin, bolts and nuts, 1 cylinder water cock handle, 1 sand box handle, 1 ashpan handle, 1 mud collector cock handle, 1 spindle and carrier, 2 blow-off cock spindles and handles, 1 mud collector handle guide, 1 head lamp platform with 4 studs and			
	Carried over ...	... ...	... ...	17 14 0 0

Appendix E.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.				Gross weight.			
	Brought forward ...	Ft. In. Ft. In. Ft. In.			Tons. Cwt. Qrs. lbs.				Tons. Cwt. Qrs. lbs. 17 14 0 0			
	nuts, 2 side lampholders with bolts and nuts, 1 motion lampholder and bracket, bolts and nuts, 1 cylinder water cock rod gude, 1 ashpan door with lever and 2 carriers, 1 ashpan perforated door, 1 fire door and chain, 1 central buffer with pin and nut, 1 draw hook, 1 draw pin, 2 safety pins, 1 flame plate, 1 defector plate, 2 foot steps with bolts and nuts, 2 cowcatcher stays with bolts and nuts, 4 bolts and nuts for cowcatcher to buffer beam, 2 injector spindle brackets, 2 injector brackets and 2 stays with bolts and nuts, 2 ball and socket union pipe carriers with bolts and nuts, 1 mud collector pipe clip and 2 wood screws, 4 delivery pipe clips, bolts and nuts, 1 sand box bracket, bolts and nuts, 1 intermediate shaft for cylinder water cock rods with carriers, 2 injectors with feed and overflow cocks, 2 clack boxes, 2 ball and socket union pipes, 2 piston glands and 2 bushes, 4 valve spindle glands, 1 steam blower and whistle cock, 1 steam brake valve and bracket with handle, 2 injector steam cocks, 1 scum cock and handle, 4 glass gauge cocks, 4 cylinder water cocks and levers, 2 steam chest cocks and pipes, 4 cylinder lubricators and 2 pipes, 1 steam blower pipe union and nut, 13 mud plugs, 6 washout plugs and caps, 1 regulator stuffing box and gland with studs and nuts, 1 whistle, 4 slide bar liners, 2 blow-off cocks, 1 mud discharge cock, 1 exhaust steam pipe top (extra), 4 sand pipe guides											
5 Cases	Each containing 4 brake blocks and hangers, 2 brake tie rods and washers, 2 brake coupling rods with pins and nuts, 2 brake releasing springs with eye bolts and nuts, 1 brake cylinder with piston and gland, bolts and nuts, 6 bearing springs, 12 spring hangers and screws, 12 spring pins, 6 spring pillars, 1 back balance weight with bolts and nuts, 1 set of (34) fire bars, 3 fire bar carriers	8	5	2	7	2	4	.....	1	1	2	0
5 „	Each containing 6 injector-steam, 6 delivery and 2 feed pipes, 2 steam blower pipes, 2 steam brake pipes, 2 sand pipes, 1 scum pipe, 1 whistle pipe, 1 mud discharge pipe, 2 glass gauge drip pipes, 1 reversing rod and pin, 2 sand box rods, 6 cylinder water cock rods, 1 cylinder water cock shaft with 5 cranks and 2 carriers, 1 ashpan rod, 2 boiler handrails, 1 face plate, 2 brake rods for tender, 4 tank handrails with 8 studs and nuts for tender, 1 rake, 1 pricker, 1 dart, 1 clinker shovel, 1 long shovel, 1 short shovel, 1 crowbar, 1 tube plug rod, 1 tube brush rod, 1 galvanised water bucket.	7	1	2	7	2	1	.....	1	3	0	0
5 „	Each containing 1 head lamp, 2 side lamps, 2 gauge lamps, 2 hand lamps, 1 motion lamp, 1 oil bottle, 1 oil can, 1 oil feeder	15	9	1	11	1	11	.....	0	8	3	0
	Carried over ...	4	3	2	5	2	5	....	0	2	2	0
									20	9	3	0

Appendix E.—*concld.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.						Net weight.	Gross weight.			
		Ft.	In.	Ft.	In.	Ft.	In.	Tons. Cwt. Qrs. lbs.	Tons.	Cwt.	Qrs.	lbs.
	Brought forward ...	.....						.....	20	9	3	0
5 Cases	Each containing 6 axle boxes with covers complete for engine, 6 axle boxes with covers complete for tender, 1 set of (12) screw keys, 1 large and 1 small shifting key, 1 heavy, 1 hand, 1 lead, and 1 copper hammer, 6 files and 3 handles (assorted), 6 chisels (assorted), 1 large and 1 small pin punch, 1 cotter punch, 1 foot plate brush, 1 wire tube brush, 1 tube scraper, 1 tallow kettle, 5 pad locks and key...	4	5	2	5	1	9	.....	0	14	0	0
5 Pieces	Each consisting of 1 tender tank and frame, tank with sieve and lid, 2 hind lamp platforms, 2 front and 2 hind tool boxes, bunker door, 28 wood rail pillar brackets, 1 water gauge pipe and top, 4 lifting plates.											
	Frame with horn blocks and clips, 12 spring hanger carriers, 1 front draw spring and pin, 2 intermediate buffers with shoes and guides and hind buffer plate	15	6	6	11	6	1	.....	4	2	0	0
5 „	Each consisting of 1 pair of leading tender wheels on axle complete ...	5	4	2	4	2	4	.....	0	9	1	14
5 „	Each consisting of 1 pair of centre tender wheels on axle complete ...	5	4	2	4	2	4	.....	0	9	1	14
5 „	Each consisting of 1 pair of trailing tender wheels on axles complete ...	5	4	2	4	2	4	.....	0	9	1	14
5 Cases	Each containing 1 cab roof for tender, 1 hind and 2 side rails with 14 pillars, 2 handrail pillars with tops and nuts, 2 hand rail pillar brackets with bolts and nuts	11	10	5	7	1	11	.....	0	15	1	0
5 „	Each containing (tender details) 6 bearing springs and 2 tops for centre buckles, 12 bearing spring links and screws, 1 brake shaft with lever and pin, 2 brake shaft carriers, bolts and nuts, 6 brake blocks and hangers, 6 brake hanger pins and ferrules, 3 brake tie rods and washers, 2 brake coupling rods and 2 pins, 1 brake screw with handle and nut, 1 brake screw pillar, 1 draw buffer with draw hoop and screw coupling combined, 1 draw buffer guide with india-rubber washers, bolts and nuts, 2 draw buffer volute springs, 2 safety links, 1 draw bar, 2 safety pins, 2 copper feed pipes, 2 ball and socket feed cocks and pipes with india rubber washers, 2 carriers for feed cocks with bolts and nuts, 2 feed cocks spindles and handles with guides, 2 life guards, bolts and nuts, 2 foot steps, bolts and nuts, 8 foot board carriers, bolts and nuts, 4 jointing plates for foot boards with bolts and nuts, 1 name plate with bolts and nuts, 1 gong cord guide, 1 gong with bolts and nuts, 2 screw jacks with ratchets and levers	7	10	3	0	2	5	.....	1	5	1	0
	Total gross weight of one Class F engine and tender complete ...	.....						.....	28	14	1	14

Appendix F.

Copy of Packing Account of the S. S. "Counsellor" showing measurements and weight of packages containing parts of A. Class or Locomotive Tank Engine (Metre Gauge): Makers—Messrs. B. and W. Hawthorn of Newcastle-on-Tyne.

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		F. in.	Ft. in.	Ft. in.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
1 Piece	Consisting of boiler with tubes, stays, copper fire box, brass fusible plug, 5 washout plugs, 1 iron mud-hole cover, 1 cast iron mud-hole cover, fire bar bearer, dome with steam regulator and rod, inside injector steam pipe, smoke box with door, blast pipe, 2 cylinder steam pipes, steam pipe branch and all bolts and nuts, all nuts on studs for boiler mountings, frame with axle box guides and keeps with bolts and nuts, foot-plates, front buffer cast iron casting with 4 bolts and nuts, 2 iron washer plates and 2 india rubber washers, bolts and nuts for hind casing, 2 carriages for rocking shafts with bolts and nuts, 2 brackets with washers and pins for brake gear, 12 spring link brackets rivetted to frame, cylinders with steam chest covers, all nuts on studs for covers, 8 nuts on studs for valve spindle glands and close end caps, 4 bolts and nuts for fixing front buffer guide, supports for slide bars, stays, &c. ...	19	6	7 0 7 6	.....	6 1 1 14
1 Crate	Containing 1 right hand tank with 1 copper strainer	13	10	2 10 4 2	.....	0 17 1 25
1 „	Containing 1 left hand tank with 1 copper strainer	13	10	2 10 4 2	.....	0 17 0 25
1 Piece	Consisting of 1 pair leading wheels on axle	5	1	2 5¼ 2 5¼	.....	0 10 0 10
1 „	Consisting of 1 pair driving wheels on axle with outside cranks ...	6	0½	3 8¼ 3 8¼	.....	1 1 1 14
1 „	Consisting of 1 pair trailing wheels on axle with outside cranks ...	5	7	3 8¼ 3 8¼	.....	0 19 3 14
1 Case	Lined with tin, containing 2 connecting rods with 2 bolts for 1 crosshead, 2 coupling rods complete, 4 eccentric rods and straps complete with four bolts, washers, and steel pins, 1 eccentric rod and strap for pump, 1 reversing weigh bar with 2 bolts, washers, and steel pins, 2 reversing links complete, 2 lifting links, 2 valve connecting rods with 2 bolts, washers, and steel pins, 2 slide valves, 2 valve bridles with 2 distance pieces, 2 valve spindles with 4 brass nuts, 4 slide bars with brackets, bolts, &c., at ends, 4 slide blocks, 2 pistons with rods, packing rings, and crossheads complete, 2 rocking shafts with arms and 4 reversing link sliders complete, 2 pins for sliders with cotters complete, 1 reversing handle with sector and bracket complete, 1 regulator handle, 2 handrails for tank, 4 nuts and washers, 2 handrails for front of boiler, 2 handrail studs with 2 nuts and washers for ditto, 1 flame plate, 2 stands for slide valve lubricators with 4 bolts and nuts, 1 injector rod with handle, bracket, 2 bolts and nuts, sand box gear, 4 rods, 4 levers with 3 washers, bolts, and split pins, 1 gauge for setting slides, 4 crank collars and pins, 2 front cylinder covers, 2 back cylinder covers, studs,					
	Carried over ...				.....	10 7 1 18

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. in.	Ft. in.	Ft. in.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...		.....		.....	10 7 1 18
	and nuts complete, 4 brass liners for slide bars, 2 smoke box handles and fastener, 2 valve spindle glands, 2 valve spindle bushes, 2 valve spindle close end caps, 1 pump with ram cock, lever for cock, &c., complete, 4 bolts and nuts for fixing ditto, pump feed cock gear, 2 pillars with 2 nuts, 2 levers and 1 short rod, 3 levers on bolt, 1 lever for cylinder cock gear, 1 lever for feed cock, and 1 lever for pet cock, 3 handles, and 1 sector in 3 parts, 1 for cylinder cock gear, 1 for feed cock gear, and 1 for pet cock, 5 short rods for cylinder cock gear, 3 short rods for ashpan damper, 1 short rod for pet cock gear, 2 short rods for feed cock gear	6	8½	2 11½ 2 5½	.....	1 2 1 3
1 Case	Lined with tin, containing 5 eccentric sheaves, 2 handrail pillars, with nuts and toprail with plate, bolts, and nuts for engineman's platform, 1 gauge lampholder, 1 safety valve complete, 1 injector hanger with 5 bolts and nuts, 1 injector with return clack and cock, bolts, nuts, &c., 2 clack boxes complete, 2 number plates with 4 bolts and nuts, 2 name-plates with 4 screws, 1 blow-off or mud cock, 1 pressure guage cock with stand and union pipe, 4 cylinder cocks with levers and pins, 2 water glass gauge cocks and flanges, 2 ordinary gauge cocks and flanges, 1 regulator stuffing box with box spindle, gland with 2 studs and nuts and nut and washer for spindle end, 4 steam chest cocks, 1 blower cock and handle, 1 injector steam valve with handle, 1 whistle with stand and 2⅜ inch bolts and nuts, Roscoe's lubricators, 2 Furness lubricators, 2 washout doors with clips, 6 washout plugs, 1 cap with cock for tank pipe, 2 blast pipe tops, 2 tank plugs, 2 syphons for valve spindles, 2 syphons for slide bars, 2 piston rod bushes (in 4 halves), 1 whistle pipe with 2 couplings, 1 jet cock pipe, 1 water guage pipe, 1 guage cock drain cup and pipe, 2 lubricator pipes with 2 elbows and 4 couplings, 1 pressure gauge, 4 gauge glasses with 8 india rubber rings, 2 tank strainers for manhole, 1 tin oil can, 1 tin oil feeder (long spout), 1 tin oil bottle (½ gallon), 1 wire tube brush, 1 foot-plate brush, 1 large hammer, 1 chipping hammer, 1 lead hammer, 1 copper hammer, 1 12-inch and 1 14-inch bastard file, 1 12-inch round file, 1 14 inch half round file, 1 large monkey wrench, 1 8-inch clyburn spanner, 1 complete set of screw keys, 2 padlocks and keys for tool boxes, 2 pin punches, 1 packing drawer, 1 cotter drift, 1 injector key, 4 check nuts for valve spindle glands, 2 flat chisels, 1 cross cut chisel	4	11½	2 2½ 1 11	.....	0 9 0 3
	Carried over ...		.....		.....	11 18 2 24

Appendix F.

Copy of Packing Account of the S. S. "Counsellor" showing measurements and weight of packages containing parts of A. Class or Locomotive Tank Engine (Metre Gauge): Makers—Messrs. B. and W. Hawthorn of Newcastle-on-Tyne.

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		F. in.	Ft. in.	Ft. in.	Tons. Cwt. Qrs. lbs.	Tons. Cwt. Qrs. lbs.
1 Piece	Consisting of boiler with tubes, stays, copper fire box, brass fusible plug, 5 washout plugs, 1 iron mud-hole cover, 1 cast iron mud-hole cover, fire bar bearer, dome with steam regulator and rod, inside injector steam pipe, smoke box with door, blast pipe, 2 cylinder steam pipes, steam pipe branch and all bolts and nuts, all nuts on studs for boiler mountings, frame with axle box guides and keeps with bolts and nuts, foot-plates, front buffer cast iron casting with 4 bolts and nuts, 2 iron washer plates and 2 india rubber washers, bolts and nuts for hind casing, 2 carriages for rocking shafts with bolts and nuts, 2 brackets with washers and pins for brake gear, 12 spring link brackets rivetted to frame, cylinders with steam chest covers, all nuts on studs for covers, 8 nuts on studs for valve spindle glands and close end caps, 4 bolts and nuts for fixing front buffer guide, supports for slide bars, stays, &c. ...	19	6	7 0 7 6	.....	6 1 1 14
1 Crate	Containing 1 right hand tank with 1 copper strainer	13	10	2 10 4 2	.....	0 17 1 25
1 „	Containing 1 left hand tank with 1 copper strainer	13	10	2 10 4 2	.....	0 17 0 25
1 Piece	Consisting of 1 pair leading wheels on axle	5	1	2 5¼ 2 5¼	.....	0 10 0 10
1 „	Consisting of 1 pair driving wheels on axle with outside cranks ...	6	0½	3 8¼ 3 8¼	.....	1 1 1 14
1 „	Consisting of 1 pair trailing wheels on axle with outside cranks ...	5	7	3 8¼ 3 8¼	.....	0 19 3 14
1 Case	Lined with tin, containing 2 connecting rods with 2 bolts for 1 crosshead, 2 coupling rods complete, 4 eccentric rods and straps complete with four bolts, washers, and steel pins, 1 eccentric rod and strap for pump, 1 reversing weigh bar with 2 bolts, washers, and steel pins, 2 reversing links complete, 2 lifting links, 2 valve connecting rods with 2 bolts, washers, and steel pins, 2 slide valves, 2 valve bridles with 2 distance pieces, 2 valve spindles with 4 brass nuts, 4 slide bars with brackets, bolts, &c., at ends, 4 slide blocks, 2 pistons with rods, packing rings, and crossheads complete, 2 rocking shafts with arms and 4 reversing link sliders complete, 2 pins for sliders with cotters complete, 1 reversing handle with sector and bracket complete, 1 regulator handle, 2 handrails for tank, 4 nuts and washers, 2 handrails for front of boiler, 2 handrail studs with 2 nuts and washers for ditto, 1 flame plate, 2 stands for slide valve lubricators with 4 bolts and nuts, 1 injector rod with handle, bracket, 2 bolts and nuts, sand box gear, 4 rods, 4 levers with 3 washers, bolts, and split pins, 1 gauge for setting slides, 4 crank collars and pins, 2 front cylinder covers, 2 back cylinder covers, studs,					
	Carried over ...				.....	10 7 1 18

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. in.	Ft. in.	Ft. in.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...	...	...	...	.....	10 7 1 18
	and nuts complete, 4 brass liners for slide bars, 2 smoke box handles and fastener, 2 valve spindle glands, 2 valve spindle bushes, 2 valve spindle close end caps, 1 pump with ram cock, lever for cock, &c., complete, 4 bolts and nuts for fixing ditto, pump feed cock gear, 2 pillars with 2 nuts, 2 levers and 1 short rod, 3 levers on bolt, 1 lever for cylinder cock gear, 1 lever for feed cock, and 1 lever for pet cock, 3 handles, and 1 sector in 3 parts, 1 for cylinder cock gear, 1 for feed cock gear, and 1 for pet cock, 5 short rods for cylinder cock gear, 3 short rods for ashpan damper, 1 short rod for pet cock gear, 2 short rods for feed cock gear	6	8½	2 11½ 2 5½	.....	1 2 1 3
1 Case	Lined with tin, containing 5 eccentric sheaves, 2 handrail pillars, with nuts and toprail with plate, bolts, and nuts for engineman's platform, 1 gauge lampholder, 1 safety valve complete, 1 injector hanger with 5 bolts and nuts, 1 injector with return clack and cock, bolts, nuts, &c., 2 clack boxes complete, 2 number plates with 4 bolts and nuts, 2 name-plates with 4 screws, 1 blow-off or mud cock, 1 pressure guage cock with stand and union pipe, 4 cylinder cocks with levers and pins, 2 water glass gauge cocks and flanges, 2 ordinary gauge cocks and flanges, 1 regulator stuffing box with box spindle, gland with 2 studs and nuts and nut and washer for spindle end, 4 steam chest cocks, 1 blower cock and handle, 1 injector steam valve with handle, 1 whistle with stand and 2⅜ inch bolts and nuts, Roscoe's lubricators, 2 Furness lubricators, 2 washout doors with clips, 6 washout plugs, 1 cap with cock for tank pipe, 2 blast pipe tops, 2 tank plugs, 2 syphons for valve spindles, 2 syphons for slide bars, 2 piston rod bushes (in 4 halves), 1 whistle pipe with 2 couplings, 1 jet cock pipe, 1 water guage pipe, 1 guage cock drain cup and pipe, 2 lubricator pipes with 2 elbows and 4 couplings, 1 pressure gauge, 4 gauge glasses with 8 india rubber rings, 2 tank strainers for manhole, 1 tin oil can, 1 tin oil feeder (long spout), 1 tin oil bottle (½ gallon), 1 wire tube brush, 1 foot-plate brush, 1 large hammer, 1 chipping hammer, 1 lead hammer, 1 copper hammer, 1 12-inch and 1 14-inch bastard file, 1 12-inch round file, 1 14 inch half round file, 1 large monkey wrench, 1 8-inch clyburn spanner, 1 complete set of screw keys, 2 padlocks and keys for tool boxes, 2 pin punches, 1 packing drawer, 1 cotter drift, 1 injector key, 4 check nuts for valve spindle glands, 2 flat chisels, 1 cross cut chisel	4	11½	2 2½ 1 11	.....	0 9 0 3
	Carried over ...				.....	11 18 2 24

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weight.	Gross weight.
		Ft. In.	Ft. In.	Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...	.....			.....	11 18 2 24
1 Case	Containing 6 springs with harness complete, 6 axle-boxes complete, 6 axle-box covers, 1 centre buffer for front end with coupling chain complete, 1 centre buffer for back end front end, 1 centre buffer guide for back end with 4⅛ inch top bolts, ashpan gear, 2 handles with bolt, washer, and 3 split pins, 1 sector for ditto, 1 fire door complete, 2 brick arch brackets, 1 10-ton traversing screw jack with lever and ratchet, 1 ash door, 2 side lampholders with 4 bolts and nuts, 1 front lamp holder with 2 bolts and nuts, 4 safe guards with 10 bolts and nuts, 1 crow bar, 1 rake, 1 pricker, 1 plug rod, 1 dart, 1 tube scraper, 1 coal shovel, 1 long shovel ...	5 8½	2 11½	2 5½	.....	1 1 0 3
1 „	Containing boiler wood clothing, 1 reversing rod with 2 bolts, washers and split pins, 3 tank levelli g pipes with 4 bolts and nuts and 8 collar studs and nuts, 1 brake shaft with two bolts and split pins, 1 brake shaft lever with key and tapered pin, 2 brake shaft carriages with 4 bolts and nuts, 1 brake screw with nut, 2 washers and pins, 1 brake hand wheel, 1 brake screw bracket with bolts, 8 brake rods, 4 brake hangers with wood blocks, 12 coach screws, 2 long bolts with 4 metal washers and split pins at top, 4 collar bolts at bottom with 4 iron washers, 4 metal washers and 8 split pins, 4⅝ inch studs with nuts and split pins at bottom for cross-bars, 2 brake crossbars, 1 long rod for cylinder cock gear, 1 long rod for pet cock gear, 1 long rod for feed cock gear, 2 reversing weigh-bar balance weights with 2 bolts and nuts, 2 reversing weighbar carriages with 10 bolts and nuts and 4 split pins, 1 tank crossstay with 4 bolts and nuts and two tapered pins for handrail, 1 shaft for cylinder cock gear with 3 levers, 2 metal carriages and 4 bolts and nuts, 1 blow-off or mud cock pipe with coupling, 1 injector steam pipe (top) with coupling, 1 injector steam pipe (bottom) with coupling, 1 injector delivery pipe (front) with coupling and 4 bolts and nuts, 1 injector delivery pipe (back) with coupling, 1 injector suction pipe, pump delivery pipe with pet cock lever and split pin, 8 bolts and nuts and coupling for pet cock pipe, 1 pump suction pipe with 8 bolts and nuts, 1 blower pipe (front) with 1 coupling, 1 blower pipe (back) with 1 coupling, and joint nut, 1 blower pipe (inside of smoke box) with 2 couplings and elbows, 2 sand box pipes in 4 parts with 4 bolts and nuts, 1 blower pipe hanger with 2 brass screws, 2inject or delivery, pipe hangers with 4 bolts and nuts, 1 injector steam pipe hanger with two bolts and nuts, 1 tank pipe hanger with 2 tap bolts and 2 sand pipe hangers with 4 bolts and nuts, 1 blow-off pipe hanger with 4 bolts and nuts, 1 long rod for tube brush	9 11½	2 11½	2 2½	.....	0 16 1 17
	Carried over ...	.....			.....	13 16 0 16

Appendix F.—*concld.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.			Net weignt.	Gross weight.
		Ft. In.	Ft. In.	Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs.
	Brought forward ...	.....			.....	13 16 0 16
1 Case	Containing 8 boiler clothing sheets, 2 cylinder clothing sheets, 1 defector plate, 1 dome cover, 1 sand box in two parts, bolted together with 2 hand hole covers with 2 chains and hooks, 1 chimney with 8 bolts and nuts, also 2 brackets with 2 tap bolts for lamp stand, 2 large splashers for driving wheels with 4 bolts and nuts, 2 small splashers for leading wheels with 4 bolts and nuts, 4 splasher plates for trailing wheels, wood clothing for dome, 1 smoke-box clothing bead, 1 fire box clothing bead, 1 fire-box clothing plate (front), 6 clothing straps with 5 bolts and nuts, 1 clothing strap for fire-box with 2 tap bolts, 2 tank lids, 2 coal box doors, 4 footsteps with 8 bolts and nuts. 20¾-inch cant head bolts and nuts for tanks. 10¼-inch cup head bolts and nuts for tanks. 2⅜-inch cant head bolts and nuts for tanks. 2¾-inch cant head bolts and nuts for tanks. 6¾-inch cup head bolts and nuts for tanks. 12¾-inch tap bolts for splasher plate. 4⅜-inch tap bolts for fire-box clothing ring. 2⅜-inch tap bolts for fire-box clothing ring. 22¼-inch cant head bolts and nuts for splasher plates. 10 screws for cylinder clothing, 11 screws for fire-box. Front clothing plate, wood (teak), for engineman's platform ...	5 8½	3 11	3 5½	.....	0 15 2 10
1 „	Containing cab top, wood and iron with through bolts and nuts, cab sides with pillars, cab front with window frames and mountings, 4 cab window glasses in small box, 80 cab bolts and nuts, ½-inch diameter, 16 cab bolts and nuts, ⅝-inch diameter, wood clothing for fire-box	8 8½	8 3	1 11½	.....	0 19 1 18
1 „	Containing ashpan with doors, 2 of ditto forming spark arrestors, 3 single levers split pin, small key, 2 pins and chains, 1 double lever with 3 split pins and washers, 1 small bracket rivetted to 1 door with bolt and split pin, 4 brackets for holding up doors with 8 bolts and nuts, 8 bolts and nuts for fixing ashpan doors, 18 single fire-bars, 2 double fire-bars rivetted together, 1 back end buffer casing with 1 volute spring and 2 washer plates	4 0	3 5½	1 8½	.....	0 7 3 0
1 „ in Crate	Lined with tin, containing 1 front lamp, 2 side lamps, 2 hand lamps, 2 gauge lamps	5 7	3 5	3 1		0 4 2 14
	Total gross weight of one A class engine and tender complete.				14 14 0 0	16 3 2 2

Appendix F.—*contd.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
	Brought forward ...	Ft. In. Ft. In. Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs. 11 18 2 24
1 Case	Containing 6 springs with harness complete, 6 axle-boxes complete, 6 axle-box covers, 1 centre buffer for front end with coupling chain complete, 1 centre buffer for back end front end, 1 centre buffer guide for back end with 4¾ inch top bolts, ashpan gear, 2 handles with bolt, washer, and 3 split pins, 1 sector for ditto, 1 fire door complete, 2 brick arch brackets, 1 10-ton traversing screw jack with lever and ratchet, 1 ash door, 2 side lampholders with 4 bolts and nuts, 1 front lamp holder with 2 bolts and nuts, 4 safe guards with 10 bolts and nuts, 1 crow bar, 1 rake, 1 pricker, 1 plug rod, 1 dart, 1 tube scraper, 1 coal shovel, 1 long shovel ...	5 8½ 2 11½ 2 5½	.....	1 1 0 3
1 „	Containing boiler wood clothing, 1 reversing rod with 2 bolts, washers and split pins, 3 tank levelli g pipes with 4 bolts and nuts and 8 collar studs and nuts, 1 brake shaft with two bolts and split pins, 1 brake shaft lever with key and tapered pin, 2 brake shaft carriages with 4 bolts and nuts, 1 brake screw with nut, 2 washers and pins, 1 brake hand wheel, 1 brake screw bracket with bolts, 8 brake rods, 4 brake hangers with wood blocks, 12 coach screws, 2 long bolts with 4 metal washers and split pins at top, 4 collar bolts at bottom with 4 iron washers, 4 metal washers and 8 split pins, 4⅜ inch studs with nuts and split pins at bottom for cross-bars, 2 brake crossbars, 1 long rod for cylinder cock gear, 1 long rod for pet cock gear, 1 long rod for feed cock gear, 2 reversing weigh-bar balance weights with 2 bolts and nuts, 2 reversing weighbar carriages with 10 bolts and nuts and 4 split pins, 1 tank crossstay with 4 bolts and nuts and two tapered pins for handrail, 1 shaft for cylinder cock gear with 3 levers, 2 metal carriages and 4 bolts and nuts, 1 blow-off or mud cock pipe with coupling, 1 injector steam pipe (top) with coupling, 1 injector steam pipe (bottom) with coupling, 1 injector delivery pipe (front) with coupling and 4 bolts and nuts, 1 injector delivery pipe (back) with coupling, 1 injector suction pipe, pump delivery pipe with pet cock lever and split pin, 8 bolts and nuts and coupling for pet cock pipe, 1 pump suction pipe with 8 bolts and nuts, 1 blower pipe (front) with 1 coupling, 1 blower pipe (back) with 1 coupling, and joint nut, 1 blower pipe (inside of smoke box) with 2 couplings and elbows, 2 sand box pipes in 4 parts with 4 bolts and nuts, 1 blower pipe hanger with 2 brass screws, 2inject or delivery, pipe hangers with 4 bolts and nuts, 1 injector steam pipe hanger with two bolts and nuts, 1 tank pipe hanger with 2 tap bolts and 2 sand pipe hangers with 4 bolts and nuts, 1 blow-off pipe hanger with 4 bolts and nuts, 1 long rod for tube brush	9 11½ 2 11½ 2 2½	.....	0 16 1 17
	Carried over ...	.....	.....	13 16 0 16

Appendix F.—*concld.*

Description and number of packages.	Description of Stores showing Contents of packages in detail.	Outside measurement of each package.	Net weight.	Gross weight.
	Brought forward ...	Ft. In. Ft. In. Ft. In.	Tons. cwt. qrs. lbs.	Tons. cwt. qrs. lbs. 13 16 0 16
1 Case	Containing 8 boiler clothing sheets, 2 cylinder clothing sheets, 1 defector plate, 1 dome cover, 1 sand box in two parts, bolted together with 2 hand hole covers with 2 chains and hooks, 1 chimney with 8 bolts and nuts, also 2 brackets with 2 tap bolts for lamp stand, 2 large splashers for driving wheels with 4 bolts and nuts, 2 small splashers for leading wheels with 4 bolts and nuts, 4 splasher plates for trailing wheels, wood clothing for dome, 1 smoke-box clothing bead, 1 fire box clothing bead, 1 fire-box clothing plate (front), 6 clothing straps with 5 bolts and nuts, 1 clothing strap for fire-box with 2 tap bolts, 2 tank lids, 2 coal box doors, 4 foot-steps with 8 bolts and nuts. 20½-inch cant head bolts and nuts for tanks. 10½-inch cup head bolts and nuts for tanks. 2⅝-inch cant head bolts and nuts for tanks. 2¾-inch cant head bolts and nuts for tanks. 6¾-inch cup head bolts and nuts for tanks. 12½-inch tap bolts for splasher plate. 4⅛-inch tap bolts for fire-box clothing ring. 2⅝-inch tap bolts for fire-box clothing ring. 22½-inch cant head bolts and nuts for splasher plates. 10 screws for cylinder clothing, 11 screws for fire-box.			
	Front clothing plate, wood (teak), for engineman's platform ...	5 8½ 3 11 3 5½	.....	0 15 2 10
1 „	Containing cab top, wood and iron with through bolts and nuts, cab sides with pillars, cab front with window frames and mountings, 4 cab window glasses in small box, 80 cab bolts and nuts, ½-inch diameter, 16 cab bolts and nuts, ⅝-inch diameter, wood clothing for fire-box	8 8½ 8 3 1 11½	.....	0 19 1 18
1 „	Containing ashpan with doors, 2 of ditto forming spark arrestors, 3 single levers split pin, small key, 2 pins and chains, 1 double lever with 3 split pins and washers, 1 small bracket rivetted to 1 door with bolt and split pin, 4 brackets for holding up doors with 8 bolts and nuts, 8 bolts and nuts for fixing ashpan doors, 18 single fire-bars, 2 double fire-bars rivetted together, 1 back end buffer casing with 1 volute spring and 2 washer plates	4 0 3 5½ 1 8½	.....	0 7 3 0
1 „ in Crate	Lined with tin, containing 1 front lamp, 2 side lamps, 2 hand lamps, 2 gauge lamps	5 7 3 5 3 1		0 4 2 14
	Total gross weight of one A class engine and tender complete.		14 14 0 0	16 3 2 2

APPENDIX G.

Statement showing particulars of cost, &c., of (Heavy) Broad Gauge and (Light) Metre Gauge Locomotive Engines compiled from returns received from Railway authorities.

Class of Engine.	Gauge.	English cost, F. O. B	Entire Sea Freight.	Loss by Exchange.*	Landing and Insurance charges.	Erection Charges. Labour.	Erection Charges. Materials.	Total cost, exclusive of Indian carriage charges.	Remarks.
		£ s. d.	£ s. d.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Engine, Heavy L Class (on Contract No. 884 of 1884-85)	5′ 6″	2,533 5 2	115 16 0	7,214 12 3	495 5 5	255 15 0	230 11 10	34,687 5 10	*Vide* letter No. 638 D. G. R., dated 9th June 1891, from Manager, North Western Railway.
,, H B ,, (on Contract No. 1198 of 1888...	,,	1,852 0 0	134 16 1	9,223 3 5	445 0 4	753 2 5	524 5 5	30,818 12 1	
,, Light A ,, ...	Metre.	870 0 0	100 0 0	...	30 0 0	215 0 0	138 5 4	10,083 5 4	
,, Heavy E ,, ...	,,	1,465 0 0	86 12 4	...	75 0 0	280 0 0	160 10 8	16,031 13 4	*Vide* letter No. 3956-59 W.-R., dated 13th May 1891, from the Manager and Engineer-in-Chief, Burma State Railway.
,, ,, F ,, ...	,,	1,203 0 0	150 0 0	4,544 0 0	155 0 0	432 0 0	284 0 0	18,945 0 0	
,, ,, O ,, ...	,,	1,245 0 0	150 0 0	5,640 0 0	257 0 0	791 0 0	426 0 0	21,064 0 0	

* Calculated according to the official rate in force for the year in which the engines were received on the line.

Appendix H.

Statement showing the quantity and rate per cwt., &c., of ironwork and fittings required in the construction of an open Goods Wagon and Brakevan, respectively, 5′ 6″ gauge as obtained from the schedule attached to Contract No. 4093 of 6th November 1890.

Item number in schedule.			RATES DELIVERED FREE ON BOARD IN THE PORTS OF LONDON OR LIVERPOOL.					
			Open Goods Wagon.			Brake Van.		
			Weight.	Rate.	Amount.	Weight.	¡Rate.	Amount.
			Cwt. qrs. lbs.	*s. d.*	£ *s. d.*	Cwt. qrs. lbs.	*s. d.*	£ *s. d.*
1	Steel channel, H, and angle bar in underframe	per cwt.	22 0 15	18 0	19 18 5	22 0 0	22 6	24 15 0
2	Plate in underframe	,,	13 0 23	18 0	11 17 8½	14 3 3	22 6	16 12 6
3	Underframe ironwork	,,	8 1 1	30 0	12 7 9	10 2 11	33 6	17 15 1
4	Buffers	,,	6 3 1	38 0	12 16 10	6 3 1	38 0	12 16 10
5	Yorkshire ironwork	,,	4 0 13	53 0	10 18 2	4 0 8	53 0	10 15 9
6	Cast iron work	,,	0 2 10	11 6	0 6 9½	5 0 14	11 6	2 8 11½
7	Brake gear	,,	1 2 22	36 0	3 1 1	9 2 6	37 0	17 13 6
8	Steel angle, &c., bar in wagon body ...	,,	8 3 7	25 6	11 4 8½	...	...	...
9	Plate in wagon body	,,	7 0 25	25 6	9 4 2	...	...	...
10	Body ironwork	,,	3 3 7½	30 0	5 14 6	9 3 13	33 0	16 5 7
11	Panel plates, for brake van	,,	...	...	...	6 1 2	25 0	7 16 8½
12	Hoop iron	,,	...	...	...	1 0 15	18 0	1 0 5
13	Bolts, nuts, coach-screws, split pins, and washers	,,	1 0 2	26 0	1 6 5½	3 3 8	27 3	5 4 2
14	Rivets	,,	1 2 9½	24 0	1 18 0	1 1 0	24 0	1 10 0
15	Iron, wood-screws	per gross.	...	...	...	583 doz.	2 0	4 17 2
16	Galvanized corrugated wrought iron roofing sheets	per cwt.	...	...	...	6 0 3	28 0	8 8 9
17	Galvanized wroughtiron washer bars ...	,,	...	...	...	0 1 18½	24 0	0 10 0
18	Galvanized bolts and nuts, coach-screws, and washers	,,	...	...	...	0 0 26¾	56 0	0 13 1½
19	Gun-metal lamp rings	Each	...	...	...	No. 1	3 0	0 3 0
20	,, door handles, with locks (single handle)	,,	...	...	...	,, 1	5 6	0 5 6
21	Gun-metal staples for ditto	,,	...	...	...	,, 1	0 5	0 0 5
22	,, escutcheons	,,	...	...	...	,, 2	0 4	0 0 8
23	,, doors hinges 3″ × 2″ ...	,,	...	...	...	,, 4	1 5	0 5 8
24	,, hinges for dog-box lid, 3″ × 1½″	,,	...	...	...	,, 4	1 4	0 5 4
25	Gun-metal hinges for dog-box door, 1¾″ × 1¾″	,,	...	...	...	,, 4	0 10	0 3 4
26	Gun-metal hinges for guards' glasses, 2″ × 1″	,,	...	...	...	,, 4	0 10	0 3 4
27	Gun-metal hinges for letter-box, 2″ × ¾″ ...	,,	...	...	...	,, 4	0 8	0 2 8
28	,, knobs or plates	,,	...	...	...	,, 6	0 5	0 2 6
29	,, spiral spring handles with iron plate	,,	...	...	...	,, 2	4 6	0 9 0
30	Gun-metal bolts for guards' look-out glasses	,,	...	...	...	,, 2	1 3	0 2 6
31	,, buttons for guards' windows	,,	...	...	...	,, 2	0 3½	0 0 7
32	,, pulleys with cast iron bracket, lower	,,	...	...	...	,, 1	4 0	0 4 0

Appendix H.—*concld.*

Item number in schedule.			RATES DELIVERED FREE ON BOARD IN THE PORTS OF LONDON OR LIVERPOOL.					
			Open Goods Wagon.			Brake-van.		
			Weight.	Rate.	Amount.	Weight.	Rate.	Amount.
			Cwt. qrs. lbs.	*s. d.*	£ *s. d.*	Cwt. qrs. lbs.	*s. d.*	£ *s. d.*
33	Gun-metal pulleys, with cast-iron bracket, upper	Each	...	...	...	No. 1	5 6	0 5 6
34	Brass plates and leather straps for windows	„	...	...	...	„ 2	0 4	0 0 8
35	Iron private locks and plates ...	„	...	...	...	„ 2	0 7	0 1 2
36	„ bolts and staples for partition doors ...	„	...	...	...	„ 1	2 6	0 2 6
37	„ butt hinges for partition doors 3″ × 1½″	„	...	...	...	„ 6	0 10	0 5 0
38	Iron hooks and eyes for guards' glasses ...	„	...	...	...	„ 2	0 9	0 1 6
39	Cast-iron striking plate for guards' spiral spring handles	„	...	...	...	„ 2	0 7	0 1 2
40	Copper panel pins	per lb.	...	...	...	lb. 1	1 6	0 1 6
41	Wrought iron enamelled commode with cast-iron top, teak wood lids, gun-metal hinges, &c., complete	Each	...	...	..	No. 1	140 0	7 0 0
42	Underframe, underframe and body steel and ironwork for one ballast wagon ...	Set	...	...	100 14 6½	...	...	...
43	Underframe, underframe and body steel and ironwork, roofing, lavatory and metallic fittings and panel pins for one brake van	„	...	...	...	...	...	160 1 0½

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(4)—India Rubber Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (4)—INDIA RUBBER FITTINGS.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	*s.*	*d.*	Unit.	Remarks.
3539	5 -6 -90 ...	Blocks, India rubber.	Vulcanized, for carriage bodies 9″ × 3″ × 1″ with $\frac{15}{16}$″ holes	0	3	2	Each.	Attock's Patent
4164	19-11-90		,, ,, ,, ,, 9″ × 3″ × 1″ × $\frac{15}{16}$″ holes	0	3	3	,,	
3410	14- 4-90 ...		,, ,, ,, ,, ...	0	2	7	,,	
3860	29- 9-90 ...		,, ,, ,, ,, ...	0	1	$10\frac{1}{2}$	,,	
3410	14- 4-90 ...	Cushions, India rubber.	Vulcanized, for window sashes	0	2	0	,,	
3539	5- 6-90		,, ,, glass panes, bottom	1	7	1	%	
			,, ,, ,, ,, side	1	13	4	,,	
4164	19-11-90		,, ,, glass panes, bottom	0	16	8	,,	
			,, ,, ,, ,, side	1	13	4	,,	
3483	20- 5-90 ...		,, ,, window sashes	0	16	0	,,	
3498	24- 5-90 ...		,, ,, ,, ,, ...	1	7	1	,,	
3318	24- 5-90 ...		,, ,, ,, ,, ...	1	5	0	,,	
3860	29- 9-90 ...		,, ,, ,, ,, ...	1	5	0	,,	
4164	29- 9-90 ...		,, ,, ,, ,, ...	1	9	2	,,	
				1	5	0	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (4)—INDIA RUBBER FITTINGS—*concld.*

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3410 14-4-90 ...	Rings ...	Buffer	0	14	6	Each.	
3498 24-5-90 ...	Springs ...	India rubber, for window sashes	1	10	0	%	
3539 5 -6-90 ...	Tyres ...	India rubber, for wheels of luggage trucks	0	9	7	Each.	
3483 20-5-90 ...	Washers ...	Vulcanized, India rubber, for Rendell's patent screw buffer	0	2	0	Each.	
3860 29-9-90 ...		,, ,, ,, 6″ diameter by 2″ hole, 2″ thick, for engine buffer...	0	5	8	,,	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(3) Metallic and other Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (4)—INDIA RUBBER FITTINGS—*concld.*

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3410	14-4-90 ...	Rings ...	Buffer	0	14	6	Each.	
3498	24-5-90 ...	Springs ...	India rubber, for window sashes	1	10	0	%	
3539	5 -6-90 ...	Tyres ...	India rubber, for wheels of luggage trucks	0	9	7	Each.	
3483	20-5-90 ...	Washers ...	Vulcanized, India rubber, for Rendell's patent screw buffer	0	2	0	Each.	
3860	29-9-90 ...		,, ,, ,, 6″ diameter by 2″ hole, 2″ thick, for engine buffer...	0	5	8	,,	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(3) Metallic and other Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (3).—METALLIC AND OTHER FITTINGS.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3601	21 -1-90 ...	Basins ...	Washing, earthenware, with pipes, plugs and chains complete	1	0	3	Each.	
3434	8 -5-90 ...	Gauze ...	Copper wire, 34 mesh, wire 32 S. W. G., 3 feet wide	0	1	2½	L. ft.	
3742	26 -7-90 ...		Iron wire, wove, galvanized, 7 mèshes to 2 lineal inches, each piece 30′ × 2′ 6″.	0	0	3¼	S. ft.	
3924	10-10-90 ...	Glasses ...	Looking, 18″ × 18″ × ¼″ thick, ground and polished, with teak wood frames, 1′, 8½″ square, 1½″ wide and ⅞″ thick.	0	16	0	Each.	
		Glass.	*Plate, best glazing quality, British polished.*					
4143	11-11-90 ..		Fluted, 17″ × 16″ × ⅛″ thick	0	0	9½	Pane.	
3431	6 -5-90 ...		Ground, 18½″ × 14″ × $\frac{3}{16}$″ ,, ...	0	3	1	,,	For inspection carriage.
3442	8 -5-90 ...		,, 18″ × 16″ × $\frac{3}{16}$″ ,, ...	0	3	2½	,,	For bath room.
4151	14-11-90 ...		Neutral tinted, 24″ × 18¾″ × $\frac{3}{16}$″ ,, ...	0	8	8½	,,	22 lbs. per sq. foot.
3163	9 -1-90 ...		,, ,, 22″ × 17″ × $\frac{3}{16}$″ ,, ...	0	6	0¾	,,	
			,, ,, 22″ × 14″ × $\frac{3}{16}$″ ,, ...	0	5	0	,,	
			,, ,, 20″ × 20″ × $\frac{3}{16}$″ ,, ...	0	6	5¾	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (3). METALLIC AND OTHER FITTINGS—*contd.*

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
	Glass—*contd.*	*Plate, best glazing quality, British polished*—contd.					
4151 14-11-90 ...		Neutral tinted 19″ × 18″ × $\frac{3}{16}$″ thick	0	6	6⅜	Pane.	
4151 14-11-90 ...		,, ,, 18¾″ × 18″ × $\frac{3}{16}$″ ,, ...	0	6	6⅜	,,	
3403 5 -4-90 ...		,, ,, 18½″ × 18¼″ × $\frac{3}{16}$″ ,, ...	0	5	10	,,	
3400 5 -4-90 ...		,, ,, 18¼″ × 18¼″ × $\frac{3}{16}$″ ,, ...	0	5	10	,,	
3163 9 -1-90 ...		,, ,, 18″ × 14″ × $\frac{3}{16}$″ ,, ...	0	4	1	,,	
		,, ,, 12″ × 12″ × $\frac{3}{16}$″ ,, ...	0	2	4	,,	
3569 12 -6-90 ...		White, 28″ × 7½″ × ¼″ thick	0	2	0¾	,,	
4143 11-11-90 ...		,, 28″ × 7½″ × ¼″ ,, ...	0	2	0¼	,,	
3569 12 -6-90 ...		,, 24″ × 18¾″ × $\frac{3}{16}$″ ,, ...	0	5	7½	,,	
4143 11-11-90 ...		,, 24″ × 18¾″ × $\frac{3}{16}$″ ,, ...	0	5	6	,,	
3569 12 -6-90 ...		,, 24″ × 18″ × $\frac{3}{16}$″ ,, ...	0	5	2	,,	
4143 11-11-90 ...		,, 24″ × 18″ × $\frac{3}{16}$″ ,, ...	0	5	0⅜	,,	
3569 12 -6-90 ...		,, 24″ × 17½″ × $\frac{3}{16}$″ ,, ...	0	5	2	,,	
4143 11-11-90 ...		,, 24″ × 17½″ × $\frac{3}{16}$″ ,, ...	0	5	0⅜	,,	
3569 12 -6-90 ...		,, 24″ × 12″ × $\frac{3}{16}$″ ,, ...	0	3	4	,,	
4143 11-11-90 ...		,, 24″ × 12″ × $\frac{3}{16}$″ ,, ...	0	3	3	,,	
3569 21-10-90 ...		,, 24″ × 7″ × ¼″ ,, ...	0	1	6¾	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (3).—METALLIC AND OTHER FITTINGS—*concld.*

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
	Glass—*concld.*	*Plate, best glazing quality, British polished*—concld.					
4143 11-11-90 ...		White 24″ × 7″ × ¼″ thick	0	1	6¼	Pane.	
3999 21-10-90 ...		,, 22″ × 15″ × $\frac{3}{16}$,, ...	0	4	4¼	,,	
3569 12 -6-90 ...		,, 19″ × 18″ × $\frac{3}{16}$″ ,, ...	0	4	1	,,	
4143 11-11-90 ...		,, 19″ × 18″ × $\frac{3}{16}$″ ,, ...	0	4	0	,,	
3569 12 -6-90 ...		,, 19″ × 16″ × $\frac{3}{16}$″ ,, ...	0	3	7¾	,,	
4143 11-11-90 ...		,, 19″ × 16″ × $\frac{3}{16}$″ ,, ...	0	3	6¾	,,	
3431 6 -5-90 ...		,, 18½″ × 14″ × $\frac{3}{16}$″ ,, ...	0	3	1	,,	For brake vans.
3442 8 -5-90 ...		,, 18″ × 16″ × $\frac{3}{16}$″ ,, ...	0	3	2½	,,	For windows.
3902 9-10-90 ...	Handles ...	Brass, carriage door, with locks and plates, left hand	0	3	0	Each.	
3505 24 -5-90 ...	Hasps and Staples	Iron 6″	0	0	6	Each.	
3505 24 -5-90 ...	Hooks ...	Jhilmill, wrought iron, for carriage venetians	0	8	4	% Pairs.	
3991 21-10-90 ...	Tiles ...	Porcelain, plain, for roof lamp reflectors	0	4	8	Each.	
		,, with monogram ,, ...	0	5	0	,,	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(1) Complete Ironwork for Vehicles

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES.

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4093	6-11-90 ...	Brake Vans, 19 feet 3 inches long.	Underframe and body steel and iron work, roofing, lavatory, metallic fittings, underframe, and panel pins, for brake vans, with 6 wheels ... ... For detailed rates, see Appendix H.	160	0	0	Set	Note.—The cost per set does not include the price of wheels and axles, bearing and draw, and buffer springs, india-rubber window cushions, Attock's blocks, lamps, and axle boxes.
4131	8-11-90 ...	Carriages, first class, 24 feet 2 inches long.	Underframe, underframe and body steel and iron work, roofing, lavatory, and metallic fittings, and panel pins, for first class carriage complete. Estimated weight, 3-5-2-23.	199	10	0	Set.	
4131	8-11-90 ...	Carriages, second class, 24 feet 2 inches long.	Underframe, underframe and body steel and iron work, roofing, lavatory and metallic fittings, and panel pins, for second class carriages complete.	199	10	0	Set.	
4177	4-12-90 ...	Cranes, Accident	Travelling, mounted on steel truck, and suited to lift and slue a weight of 10 tons, at a maximum radius of 16 feet from the centre of the crane to the centre of chain, at a height of 23 feet 6 inches. Wheels 6 in number.	545	0	0	Each.	
4093	6-11-90 ...	Wagons, Ballast, 19 feet 3 inches long.	Underframe, underframe and body steel and iron work, for ballast wagons For detailed rates see Appendix H.	100	15	0	Set.	
3310	1-3-90 ...	Wagons, Covered Goods, 19 feet 6 inches long.	Underframe, underframe and body steel and iron work, for covered goods wagons. (Details given in the Contract.)	140	15	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES—*contd.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3423	1-5-90 ...	Brake Vans, 18 feet long.	Underframe, underframe and body steel and ironwork, lavatory and metallic fittings, trimmings, and window glass (wheels 2 ft. 4 inches diameter.) *Inside dimensions.* Length ... ... 17 feet 4 inches. Width ... ... 6 „ 4 „ Height, centre ... ... 6 „ 6¾ „	116	16	0	Set.	
3933	10-10-90 ...	Carriages, Composite	Underframe, underframe and body steel and ironwork, roofing and metallic fittings, for composite (first and second class) carriages.	73	15	0	Set.	The invoice prices for the composite and third class carriages are just the same.
3423	1-5-90 ...	Carriages, first class	Underframe, underframe and body steel and iron work, lavatory and metallic fittings, trimmings, and window glass, for first class or inspection carriage, with end doors (wheels 2 ft. 4 inches diameter.)	177	10	0	Set.	
3933	10-10-90 ...	Carriages, 3rd class.	Underframe, underframe and body steel and iron work, roofing, and metallic fittings, for third class carriages	73	15	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (1).—COMPLETE IRON-WORK FOR VEHICLES—*concld.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3154	2-1-90 ...	Cranes.	Accident, travelling, mounted on steel trucks, suited to lift and slue a weight of five tons at a maximum radius of 16 feet from centre of pillar to centre of chain	372	10	0	Each.	Extra price free on board shipped from Tyne £ 3-5-0.
			Accident, travelling, mounted on steel truck, suited to lift and slue a weight of 10 tons	525	0	0	„	Extra price free on board shipped from Tyne £ 4-5-0.
3404	5-4-90 ...	Wagons, Ballast, 14 feet long.	Underframe, and steel and iron work, for underframes and bodies for low sided or ballast wagons with wood side and ends ...	59	0	6	Set.	Cwt. qrs. lbs. Estimated total weight 34 1 18
3404	5-4-90 ...	Timber Truck, 14 feet long.	Underframe and body, steel and iron work, complete for timber truck, 14 feet long with two fixed Bosters	68	0	0	Set.	Ditto ditto 37 3 14
3783	„ ...	Wagons, Jute, 14 feet long.	Bogie underframe, and body steel and iron work, &c., for jute wagons ...	38	14	0	Set.	For Kaunia-Dharla Railway 2′ 6″ gauge.

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(2) Ironwork.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK.

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3179	23 -1-90 ...	Axles.	*Bogie*, carriage and wagon, wheel seats rough turned	5	5	8	Each.	Taylor Brothers.
			Ordinary „ „ „	5	2	2	„	
3535	3 -6-90 ...		Iron, 5½″, journal 4¼″ diameter when finished	4	18	10	„	Lowmoor Company.
4146	11-11-90 ...		„ 5½″ diameter at centre, journal 4¼″ diameter × 9″ long when finished.	5	0	3	„	Taylor Brothers.
3208	30 -1-90 ...	Axle Boxes.	Without brasses, 9″ × 4″, leather washers, wrought iron shields and set screws.	0	13	0	Each.	
3282	24 -2-90 ...		„ „ „ „ „	0	12	0	„	
4161	17-11-90 ...		With gun-metal bearings, leather washers, wrought iron shields, and set screws complete.	1	2	3	„	
3173	16 -1-90 ...	Couplings.	Screw, with shackles, pins, and collars, complete	1	12	7	Each.	
3489	23 -5-90 ...		„ with three shackles, pins, and washers, complete	1	11	9	„	
3488	23 -5-90 ...		„ „ „ „	1	12	7½	„	
3753	1 -8-90 ...	Body Ironwork—spare parts of—	Iron, corrugated, galvanized, curved, for carriage roof	15	2	6	Ton.	
3566	10 -6-90 ...		Iron sheets, for panels of sizes	16	15	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
	Springs.	Bearing, for carriages	1	18	10	Each.	
3152 2-1-90 ...		„ 11 plates, 4′ wide	1	17	3	„	
		„ for wagons	1	0	10	„	
		„ eliptical, bogie (in groups of 3)	2	11	2	„	
3278 22-2-90 ...		Bearing, for carriages and wagons	1	2	11	„	Timmis' patent.
3158 7-1-90 ...		Buffer, with malleable C. I. washers and steel ferrules	0	5	3¾	„	
3946 15-10-90 ...		„ spiral	0	9	5	„	
3278 22-2-90 ...		„ volute	0	7	5	„	
		„ Timmis patent, unequal section	0	12	0	„	
		For draw bars—					
		4″ deep × 2½″ hole B	0	7	3	„	
3159 6-1-90 ...		8″ „ × 1¾″ „ H 2	0	8	0	„	
		8¾″ „ × 2¼″ „ C	0	7	6	„	
		9½″ „ × 2¼″ „	0	7	9	„	
		10″ „ × 2″ „ H	0	7	0	„	
		16″ „ × 1½″ „ D	0	8	6	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £.	s.	d.	Unit.	Remarks.
3278 22-2-90 ...	Springs—*concld.*	Draw Volute	0	8	6	Each.	
3561 10-6-90 ...		„ „ for draw hooks	0	5	6	„	
		B 2	0	7	6	„	
		D 2	0	12	0	„	
3159 6-1-90 ...		E 2	0	8	0	„	
		F	0	5	6	„	
		G 2	0	8	3	„	
		H 2	0	7	6	„	
		I or J	0	7	0	„	
		K	0	7	6	„	
3152 2-1-90 ...		Triple coil, nest, bogie	0	13	6	„	
	Tyres.	Bessemer, for bogie carriage, and wagons	2	7	9	Each.	
3169 15-1-90 ...		„ I. S. R. type for „	2	17	8	„	
		„ 3′ 2⅝″	2	14	4	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4133	10-11-90 ...	Underframes, set complete.	Underframe, underframe steel and ironwork, and ironsheet, for panels, for Post Office and third class carriages combined, 28 feet long.	84	10	0	Each.	Total weight of steel and ironwork. Cwt. qrs. lbs. 59 2 7
3393	28-3-90 ...		Underframes, iron, without buffers, scroll irons, axle guards, bearing springs, footstep brackets, &c., for carriages, rivetted up complete.	43	2	6	,,	Total weight of steel and ironwork. 33 1 13
		Underframe ironwork—spare parts of—	*Brake gear, Automatic Vacuum, for—*					
			Brake vans, 24 feet long, with piping	44	0	0	each.	Including Brake rigging.
			,, 24 feet long, without piping	37	14	0	,,	Including Brake rigging.
3974	21-10-90 ...		Composite carriages, 24 feet long	38	0	0	,,	Including Brake rigging.
			Horse boxes ,, ...					
			Luggage vans ,, ...					
			Second class carriages ,, ...					
			Store vans ,, ...					
			Third class carriages, 27′ 4″					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1890.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
			Brake gear, Automatic, Vacuum —spare parts of—					
		Underframe ironwork—spare parts of—*contd.*	Cradles	1	11	10	Each.	
			Draw bars, for carriage and wagon—					
4019	23-10-90		Draw bars, A size	1	16	7	,,	
			,, ,, B ,, ...	2	11	10	,,	
			,, ,, C ,, ...	2	18	3	,,	
			,, ,, F ,, ...	2	0	8	,,	
			,, ,, G ,, ...	2	3	11½	,,	
4022	24-10-90		Diaphragm valve ball (new pattern)	0	1	0	,,	
			,, van valve	0	1	9	,,	
3212	30-1-90		Hose pipe, with couplings 27″ × 2″	1	15	0	,,	For all vehicles.
			Pipes or hose, with couplings complete...	1	15	0	,,	
4022	24-10-90 ...		,, ,, without couplings	0	13	0	,,	
3874	2-10-90 ...		Joints, insertion, for ball valve	0	0	3	,,	
			Piping, with hose, coupling, &c., complete in lengths of 27 feet, for 3rd class carriages.	6	6	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*contd.*

5′ 6″ Gauge.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
4022 24-10-90	Underframe ironwork—spare parts of—*concld.*	Washers, coupling, for 2″ couplings, 27 feet long	0	0	8	Each.	
		,, ,, ,, 1″ ,, ...	0	0	5	,,	
		,, seating, for van valve	0	0	9	,,	
3173 16-1-90 ...		Steel castings, bogie centre, finished, but without pins	8	11	6	Set.	This includes 2 pairs castings to a set.
4168 24-11-90 ...	Wheels and Axles...	Complete, for carriages and wagons	17	5	0	Pair.	
4169 24-11-90 ...		,, ,, ,, ,, ,, ...	17	7	6	,,	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2). IRONWORK—*contd.*

Metre Gauge.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3414 14-4-90 ...	Axle Boxes.	With gun metal bearings, leather washers, wrought iron shields, and set screws complete.	0	16	9	Each.	
3763 12-8-90		With gun metal bearings, leather washers, wrought iron shields and set screws, to suit $6\frac{5}{16}'' \times 2\frac{3}{4}''$ journals.	0	18	9	,,	
		With gun metal bearings, leather washers, wrought iron shields, and set screws, to suit 7″ × 3″ journals.	0	18	9	,,	
3858 27-9-90 ...		With gun metal bearings, leather washers, wrought iron shields, and set screws, for carriages.	0	18	0	,,	
3764 13-8-90 ...		With gun metal bearings, leather washers, wrought iron shields, and set screws, for jute wagons (2′ 6″ gauge).	0	18	2	,,	
4021 24-10-90 ...	Body, Iron work—spare parts of—	Iron sheets, galvanized, corrugated, curved, 8 feet 6 inches long, to cover a width of 2′ 3″.	14	0	0	Ton.	
3329 8-3-90 ...		Plates, planished, for panels of carriages, 8′ $9\frac{1}{2}''$ × 2′ $4\frac{1}{2}''$ × 12 B. W. G ...	0	16	$7\frac{1}{2}$	Cwt.	
3411 14-4-90	Springs.	Bearing, for brake vans	1	7	6	Each.	
		,, carriages	1	5	6	,,	
		,, wagons	0	11	3	,,	
3771 14-8-90 ...		,, ,, ...	0	14	0	,,	
3782 22-8-90 ...		,, ,, ...	0	17	0	,,	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*).—COACHING AND GOODS STOCK (2).—IRONWORK—*concld.*

METRE GAUGE.

Contracted for in 1890.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
3605 23-6-90 ...	Springs—*concld.*	Bearing, tension, for brake vans, 11 plates	1	7	0	Each.	
3813 9-9-90 ...		„ „ „ 11 plates	1	7	0	„	Standard size.
3485 20-5-90 ...		Buffers, 7″ long, for carriages	0	6	9	„	
3411 14-4-90 ...		„ volute	0	6	8	„	
3771 14-8-90 ...		„ for carriages and wagons	0	8	0	„	
3765 14-8-90 ...		Coiled, for buffer and draw gear	0	6	9	„	
3554 9-6-90 ...		Spiral, for bogie underframe, for first class carriages	0	5	9	„	
3946 15-10-90 ...		„ buffer	0	9	5	„	
3478 16-5-90	Underframe iron work—spare parts of—	Buffer, central, with hooks, for carriages	2	2	0	Each.	
3992 21-10-90 ...		„ „ with chain, for „	1	16	6	„	
3279 24-2-90 ...		„ screw, complete	6	2	0	„	Rendel's design.
3412 14-4-90 ...	Wheels and axles.	Sockets, spring, wrought iron, out-side	0	9	9	„	
3859 29-9-90 ...		Complete, for carriages and wagons	10	12	0	Pair.	
4191 16-12-90 ...		„ „ „	8	15	0	„	
3776 16-8-90 ...		„ „ „ journal 7″ × 3″	8	16	0	„	
		„ „ „	6	4	0	„	For Jorhat Railway (2 ft. 6 inch gauge.)

Madras,
9th February 18

Enclosure to Director General of Railways' Circular No. 2 of 1892.

RATE LIST.

CLASS E.

ROLLING STOCK.

FOR 1890.

G. C. Press, Simla.—No. 824 P. W. D.—23-3-92—983.

CLASS OF STORES E.—ROLLING STOCK SUB-HEAD (5)

PROVINCIAL.
CIVIL WORKS.

MADRAS.

Final

PRELIMINARY ISSUE.

Public Works Department.

BUDGET ESTIMATE

OF

REVENUE AND EXPENDITURE

UNDER

CIVIL WORKS

IN THE

MADRAS PRESIDENCY

FOR THE YEAR

1892-93.

MADRAS,
9th February 1892.
April

(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

Enclosure to Director General of Railways' Circular No. 2 of 1892.

RATE LIST.

CLASS E.

ROLLING STOCK.

FOR 1890.

G. C. Press, Simla.—No. 824 P. W. D.—23-3-92—983.

CLASS OF STORES E.—ROLLING STOCK SUB-HEAD (b)

PROVINCIAL.
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CIVIL WORKS

IN THE

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FOR THE YEAR

1892-93.

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Secretary to Govt., P.W.D.

Enclosure to Director General of Railways' Circular No. 2 of 1892.

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FOR 1890.

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(Signed) J. PENNYCUICK, Colonel, R.E.,
Secretary to Govt., P.W.D.

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GOVERNMENT OF MADRAS.

REVENUE.

ABSTRACT BUDGET-ESTIMATE OF REVENUE FROM CIVIL WORKS IN MADRAS FOR THE YEAR 1892–93.

—	ACTUALS, 1890–91.	BUDGET ESTIMATE, 1891–92.	REVISED ESTIMATE, 1891–92.	BUDGET ESTIMATE, 1892–93.
	Rs.	Rs.	Rs.	Rs.
1. Rents of buildings	47,304		46,400	46,400
2. Sales of buildings	1,124		4,500	4,500
3. Sales of barrack furniture	...		...	...
4. Sales of tools and plant	21,136		29,000	29,000
5. Sales of produce	1,528		2,600	2,600
6. Sales of old materials	10,505		7,800	7,800
7. Value of materials received from old buildings	293	1,00,000	2,200	2,200
8. Recoveries of deferred fees from students of Royal Civil Engineering College ...	...		...	...
Receipts from self-supporting Workshops.				
9. Interest on capital	...		...	...
10. Net profit	...		8,800	8,800
11. Tolls on roads	...		300	300
12. Ferry receipts	...		...	...
13. Unclaimed deposits	1,605		1,200	1,200
14. Fines, refunds and miscellaneous ...	14,228		15,200	15,200
Total ... Realized in Public Works Department	97,723	1,00,000	1,18,000	1,18,000
Total ... Realized in Civil and Military Departments	...	...	...	...
Total ...	97,723	1,00,000	1,18,000	1,18,000

GOVERNMENT OF MADRAS.

EXPENDITURE.

ABSTRACT BUDGET ESTIMATE OF EXPENDITURE ON CIVIL WORKS IN MADRAS FOR THE YEAR 1892–93.

—	ACTUALS, 1890–91.	BUDGET ESTIMATE, 1891–92.	REVISED ESTIMATE, 1891–92.	BUDGET ESTIMATE, 1892–93.
	Rs.	Rs.	Rs.	Rs.
Original Works.				
CIVIL BUILDINGS	12,79,436	22,66,400	15,18,282	~~10,99,156~~ 11,05,333
COMMUNICATIONS	3,18,424	3,43,100	3,49,426	2,07,879
MISCELLANEOUS PUBLIC IMPROVEMENTS	42,748	3,500	12,278	1,500
TOTAL ...	16,40,608	26,13,000	18,77,986	~~13,08,535~~ 13,14,712
REPAIRS.				
CIVIL BUILDINGS	2,21,559	2,00,270	1,91,104	1,69,690
COMMUNICATIONS	1,30,954	1,06,200	1,36,600	1,15,200
MISCELLANEOUS PUBLIC IMPROVEMENTS	14,025	13,530	14,264	15,110
TOTAL ...	3,66,538	3,20,000	3,43,968	3,00,000
TOTAL WORKS AND REPAIRS.				
CIVIL BUILDINGS	15,00,995	24,66,670	17,07,386	~~12,68,846~~ 12,75,023
COMMUNICATIONS	4,49,378	4,49,300	4,86,026	3,23,079
MISCELLANEOUS PUBLIC IMPROVEMENTS	56,773	17,030	28,542	16,610
TOTAL, WORKS ...	20,07,146	29,33,000	22,21,954	~~16,08,535~~ 16,14,712
ESTABLISHMENT	4,36,231	4,90,000	4,40,000	~~6,11,465~~ 6,05,288
TOOLS AND PLANT	15,346	1,00,000	1,43,609	80,000
STOCK AND SUSPENSE	21,477	...	94,437	...
PROFIT AND LOSS	...	...	...	...
TOTAL ...	24,80,200	35,23,000	~~31,00,000~~ 29,00,000	23,00,000

ABSTRACT OF THE CHARGES TO BE INCURRED BY THE PUBLIC WORKS DEPARTMENT ON PROVINCIAL CIVIL AND CONTRIBUTIONS DURING THE YEAR 1892–93.

—	BUDGET ESTIMATE, 1891–92.	REVISED ESTIMATE, 1891–92.	BUDGET ESTIMATE, 1892-93.					
			ORIGINAL WORKS.	REPAIRS.	ESTABLISHMENT.	TOOLS AND PLANT.	STOCK AND SUSPENSE.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
PROVISION FROM PROVINCIAL FUNDS—		~~45,39,959~~ 45,26,247	~~13,08,535~~ 13,14,712					~~37,66,309~~ 37,69,536
In India ...	50,48,787	~~47,06,502~~ 46,46,518		3,00,000	21,27,324	30,450	...	~~70,619~~ 70,769
In England ...	98,603	1,06,559	...	...	...	~~70,619~~ 70,769	...	
Total ...	51,47,390	~~48,13,061~~ 47,53,077	~~13,08,535~~ 13,14,712	3,00,000	~~21,27,324~~ 21,24,474	1,01,069 1,01,219	...	~~38,36,928~~ 38,40,405
Deduct—								
PROVISION FROM CONTRIBUTIONS—		17,46,518			15,19,186	21,219		15,40,405
In India ...	16,24,390	~~17,13,061~~ 16,99,277	...	...	~~15,15,859~~	~~21,069~~	...	~~15,36,928~~
Net Total ...	35,23,000	~~31,00,000~~ 29,00,000	~~13,08,535~~ 13,14,712	3,00,000	~~6,11,465~~ 6,05,288	80,000	..	23,00,000

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—CLASS A WORKS.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES FOR THE YEAR 1892–93.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.
					Rs.
				CIVIL BUILDINGS.	
				Original Works.	
				(*a*) *Major Works.*	
6. Administration...	Ganjam ...	Berhampore.	1	Deputy Tahsildar's office	...
	Vizagapatam.	Koraput ...	2	Special Assistant Agent's office ...	10,300
	Godávari Western.	Ellore ...	3	Taluk office	...
	Kistna Eastern.	Bezváda ...	4	Head Assistant Collector's office ...	...
	Do. ...	Masulipatam.	5	Taluk office	...
	Do. ...	Nandigáma.	6	Do.	...
	Kistna Western.	Tenali ...	7	Do.	...
	Do. ...	Gurazala ...	8	Do.	...
	Nellore ...	Gúdúr ...	9	Head Assistant Collector's office ...	14,622
	Do. ...	Atmakúr ...	10	Deputy Collector's office	6,300
	Bellary ...	Madakasíra.	11	Taluk office	...
	Do. ...	Hindupur...	12	Do.	...
	Do. ...	Tadpatri ...	13	Do.	...
	Cuddapah ...	Pilér ...	14	Sub-Magistrate's office	10,851
	Kurnool ...	Márkápur ...	15	Taluk office	23,398
	Do. ...	Allagada ...	16	Do.	...
	Coimbatore.	Ootacamund.	17	Additions and improvements to the Government House.	7,79,150
	~~Do.~~ Salem	Tiruchengód.	18	Taluk office	...
	Do. ...	Tirupatúr ...	19	Do.	...
	~~Do.~~ Coimbatore	Coimbatore.	20	Improvements to Huzur Treasury ...	3,020
	North Arcot.	Chandragiri.	21	Taluk office	...
	Do. ...	Wandiwash.	22	Do.	...
	Do. ...	Ranipet ...	23	Constructing compound wall around the Head Assistant Collector's office.	4,030
	West Coast.	Calicut ...	24	Collector's office	1,88,870
	Do. ...	Perinthalamana.	25	Taluk office	34,070
				Carried over ...	...

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PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

OF MADRAS.

A WORKS.

PROVINCIAL SERVICES FOR THE YEAR 1892–93—continued.

Head of Classification.	Executive Division.	Locality.	Remarks and References.
6. Administration—*cont.*	West Coast.	Mangalore.	G.O., No. 2955 W., dated 5th November 1891. Item No. 30, Class A Works, Budget of 1891–92.
	Do. ...	Tangachéri.	Estimate is awaited. Item No. 31, Class A Works, Budget of 1891–92.
	Do. ...	Anjengo ...	Estimate is awaited. Item No. 32, Class A Works, Budget of 1891–92.
	Do. ...	Manantoddy.	G.O., No. 3164 W., dated 26th November 1891. Item No. 33, Class A Works, Budget of 1891–92.
	South Arcot.	Chidambaram.	Estimate is awaited. Item No. 40, Class A Works, Budget of 1891–92.
	Do. ...	Tiruvannámalai.	Estimate is awaited. Item No. 39, Class A Works, Budget of 1891–92.
	Do. ...	Manjakuppam.	G.O., No. 2441 W., dated 11th September 1891.
	Trichinopoly.	Jayankondacholapuram.	Estimate is awaited. Item No. 44, Class A Works, Budget of 1891–92.
	Do. ...	Musiri ...	Estimate is awaited. Item No. 45, Class A Works, Budget of 1891–92.
	Consulting Madras Sr. Military Works	Madras	G.O. No: 137 W, of 15 January 1892
8. Law and Justice.	Godávari Western.	Tanuku ...	G.O., No. 91 W., dated 14th January 1890. Item No. 54, Class A Works, Budget of 1891–92.
	Kurnool ...	Márkápur...	G.O., No. 241 W., dated 26th January 1891. Item No. 57, Class A Works, Budget of 1891–92.
	South Arcot.	Tirukoilúr...	G.O., No. 2660 W., dated 10th October 1890, and G.O., No. 603 W., dated 3rd March 1891. Item No. 62, Class A Works, Budget of 1891–92.
	Tinnevelly.	Ambásamudram.	G.O., No. 2779 W., dated 22nd October 1891.
	Consulting Architect.	Madras ...	G.O., No. 1619 W., dated 15th June 1891. Item No. 66, Class A Works, Budget of 1891–92.
	Do. ...	Do. ...	G.O., No. 1619 W., dated 15th June 1891. Item No. 67, Class A Works, Budget of 1891–92.
10. Jails	Salem ...	Salem ...	G.O., No. 1440 W., dated 31st May 1889, and G.O., No. 2381 W., dated 4th September 1890. Item No. 73, Class A Works, Budget of 1891–92.
	North Arcot.	Vellore ...	G.O., No. ~~3091~~ 270 W., dated ~~18th November 1891.~~ 1 February 1892
	Trichinopoly.	Trichinopoly.	G.O., No. 1124 W., dated 16th April 1890.

GOVERNMENT OF MADRAS.

PART I—CLASS A WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.
					Rs.
				Brought forward ...	...
				CIVIL BUILDINGS—*cont.*	
				Original Works—*cont.*	
				(*a*) *Major Works*—cont.	
11. Police ...	Bellary ...	Anantapur.	44	Constructing police hospital	7,640
	Do. ...	Bellary ...	45	Do. a police ward in the compound of the Civil hospital.	8,690
	Coimbatore.	Wellington.	46	Constructing six police huts	4,800
	Do. ...	Gúdalúr ...	47	Do. an extra ward in the police hospital.	4,870
	West Coast.	Sultan's Battery, Wynaad.	48	Re-constructing six police huts ...	3,230
	South Arcot.	Panruti ...	49	Constructing a first-class police station.	2,510
	Negapatam.	Nídámangalam.	50	Do. 10 police huts ...	2,960
	Tanjore ...	Pápanásam.	51	Second-class station-house	2,580
				(*b*) *Minor Works.*	
	Godávari Western.	Tallapudi ...	52	Constructing a second-class police station-house.	2,360
	South Arcot.	Munjakuppam.	53	First-class station-house	2,370
	Tanjore ...	Tiruviar ...	54	Do. do.	2,485
	Trichinopely.	Jumbunadapuram.	55	Six huts	2,000
				(*a*) *Major Works.*	
12. Educational.	Chingleput.	Saidápet ...	56	Extending the northern side of the Teachers' College to provide 6 new class rooms.	16,000
	Madura ...	Madura ...	57	Additional accommodation to the Native College.	11,750
	Consulting Architect.	Madras ...	58	Hygienic Laboratory, Medical College.	17,347
	Do. ...	Do. ...	59	Constructing workshops for the students of the College of Engineering.	16,220
	Do. ...	Do. ...	60	Extensions to the Presidency College.	32,125
	Do. ...	Do. ...	61	Connemara Library and Victoria Technical Institute.	3,56,255
				Carried over ...	...

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A WORKS—continued.

PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Outlay.		Grant, 1892–93.		Item No.	Remarks and References.
Actual to end of 1890–91.	Probable during 1891–92.	Amount.	Total.		
Rs.	Rs.	Rs.	Rs.		
...	...	...	4,63,859 / 4,80,004		
...	575	4,565		44	G.O., No. 2180 W., dated 12th August 1891. Item No. 79, Class A Works, Budget of 1891–92.
...	...	8,690		45	G.O., No. 2986 W., dated 10th November 1891.
...	...	4,800		46	Sanctioned by the Superintending Engineer.
...	...	4,870		47	Do. do.
...	500 / 207	1,500		48	Do. do.
...	2,000 / 903	510		49	G.O., No. 1790 W., dated 1st July 1891. Item No. 102, Class A Works, Budget of 1891–92.
...	...	2,900		50	G.O., No. 28[illegible]8 W., dated 27th October 1891.
...	...	2,580		51	G.O., No. [illegible]193 W., dated 13th August 1891.
...	...	2,360		52	Sanctioned by the Superintending Engineer. Item No. 35, Class A Works, Budget of 1891–92.
...	...	2,370		53	Sanctioned by the Superintending Engineer.
...	...	2,485		54	Do. do.
...	...	2,000	37630 / 39,630	55	Do. do.
...	12,000	4,000		56	G.O., No. 762 W., dated 10th March 1891.
...	10,000	1,750		57	G.O., No. 1404 W., dated 23rd May 1891.
...	16,064 / 13,000	1,283 / 4,347		58	G.O., No. 1071 W., dated 18th April 1891, and G.O., No. 2988 W., dated 10th November 1891. Item No. 120, Class A Works, Budget of 1891–92.
...	...	8,220		59	G.O., No. 3220 W., dated 1st December 1891. Item No. 115, Class A Works, Budget of 1891–92.
...	12,000	20,125		60	G.O., No. 2736 W., dated 16th October 1891. Item No. 116, Class A Works, Budget of 1891–92.
83,917	1,50,000 / 1,00,000	1,22,338	1,53,716 / 1,60,780	61	G.O., No. 1264 W., dated 2nd May 1890, and G.O., No. 3239 W., dated 6th December 1890, Item No. 117, Class A Works, Budget of 1891–92.
...	...	...	6,64,269 / 6,71,350		

GOVERNMENT OF MADRAS.

PART I—CLASS A WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Grant, 1892-93. Amount.	Grant, 1892-93. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	6,71,350		
				Brought forward ..	...	...	...	...	~~6,64,269~~		
				CIVIL BUILDINGS—*cont.*							
				ORIGINAL WORKS—*cont.*							
				(*a*) *Major Works*—cont.							
13. Medical ...	Consulting Architect.	Madras ...	62 60	New Women and Children's hospital.	...	...	~~50,000~~ 87,306	1,55,000		62 60	Estimate is awaited. Item No. 127, Class A. Works, Budget of 1891-92.
	Do. ...	Do. ...	63 61	Constructing new criminal enclosure to accommodate 166 patients, Lunatic Asylum.	60,680	...	~~50,000~~ 54863	~~10,680~~ 5,817	1,60,817.	63 61	G.O., No. 1012 W., dated 10th April 1891. Item No. 125, Class A Works, Budget of 1891-92.
16. Miscellaneous ...	Ganjam ...	Chatrapur.	64 62	Residence for the Collector	24,900	...	10,000	14,900	~~1,65,680~~	64 62	G.O., No. 3318 W., dated 13th December 1890, and G.O., No. 2866 W., dated 28th October 1891. Item No. 131, Class A Works, Budget of 1891-92.
	Godávari Eastern.	Prattipad ...	65 63	Sub-Registrar's office	3,400	...	~~2,400~~ 340	1,000		65 63	G.O., No. 796 W., dated 18th March 1888. Item No. 132, Class A Works, Budget of 1891-92.
	Bellary ...	Bellary ...	66 64	Additions and improvements to the combined Superintending Engineer's and Executive Engineer's office	6,040	...	...	6,040		66 64	G.O., No. 3089 W., dated 18th November 1891.
	Do. ...	Anantapur.	~~67~~ 66	Constructing District Surgeon's quarters.	11,435	1,162	4,435	3,000		67 65	G.O., No. 48 W., dated 6th January 1891. Item No. 136, Class A Works, Budget of 1891-92.
	Cuddapah.	Kadiri ...	68 66	Sub-Registrar's office	2,608	...	...	2,608		68 66	G.O., No. 11 W., dated 5th January 1891. Item No. 138, Class A Works, Budget of 1891-92.
	Do. ...	Badvél ...	69 67	Do.	3,170	...	500	3,170		69 67	G.O., No. 2985 W., dated 10th November 1891.
	~~Coimbatore.~~ Salem	Athur ...	70 68	Do.	2,725	...	~~1,725~~ 1,225	1,000		70 68	Sanctioned by the Superintending Engineer. Item No. 166, Class A Works, Budget of 1891-92.
	South Arcot.	Mannárgudi.	71 69	Do.	3,550	...	...	3,550		71 69	G.O., No. 3304 W., dated 9th December 1891.
	Negapatam.	Tirupundi.	72 70	Do.	3,370	...	~~1,500~~	1,870		72 70	G.O., No 2353 W., dated 4th September 1891. Item No. 157, Class A Works, Budget of 1891-92.
				(*b*) *Minor Works.*							
	Ganjam ...	Goomsur ...	73 71	Sub-Registrar's office	2,080	...	...	2,080		73 71	Sanctioned by the Superintending Engineer.
	Vizagapatam	Anakápalle.	~~74~~ 72	Do.	2,000	...	1,000	1,200		74 72	G.O., No. 2657 W., dated 12th October 1882. Revised Estimate is awaited. Item No. 164, Class A Works, Budget of 1891-92.
	Cuddapah...	Pilér ...	~~75~~ 73	Do.	2,358	...	...	2,358		75 73	Sanctioned by Superintending Engineer.
				Minor Works	...				42,776		
				Reserve with the Government ...	...	...	...	...	58,500		
						...	...	...	~~1,67,931~~	1,71,890	
				Total, Civil Buildings ...	...	...	...	...	~~10,99,156~~	11,05,338	
				COMMUNICATIONS.							
				(*a*) *Major Works.*							
1.—Metalled roads, raised and bridged.	Ganjam ...	...	76 74	Road from Berhampore to Govindapur.	...	...	~~35,000~~ 18,000	30,000		76 74	Estimate is awaited.
	Do. ...	...	~~77~~ 75	Constructing Mahasingi bridge ...	41,200	11,986	15,000	14,214		77 75	G.O., No. 2465 W., dated 15th September 1890.
	Do. ...	...	~~78~~ 76	Re-making Hiramandalam-Battili road from the 8th to the 18th mile.	11,520	4,712	~~5,000~~ 2,000	1,810		78 76	G.O., No. 2070 W., dated 30th July 1890. Item No. 171, Class A Works, Budget of 1891-92.
	Do. ...	...	79 77	Constructing road from Tekkáli to Anantagiri.	23,500	10,071	650	12,779		79 77	G.O., No. 2076 W., dated 31st July 1890. Item No. 173, Class A Works, Budget of 1891-92.
				Carried over ...	...	...	...	58,803	~~10,99,156~~ 11,05,333		

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—CLASS A WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Grant, 1892-93. Amount.	Grant, 1892-93. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.	Rs.		
				Brought forward ...	...	...	...	58,803	...		
				CIVIL BUILDINGS—*cont.*							
				Communications—*cont.*							
				(*a*) *Major Works*—cont.							
1. Metalled roads, raised and bridged—*cont.*	Vizagapatam	...	80	Constructing a road from Potinghi to Koraput.	2,80,205	2,38,869	40,000	1,336		81	G.O., No. 3162 W., dated 7th November 1889, and G.O., No. 675 W., dated 9th March 1891. Item No. 175, Class A Works, Budget of 1891-92.
	West Coast.	...	81	Constructing a road from Vayitri to Gúdalúr.	6,60,700	3,33,408	2,00,000	1,00,000		82	G.O., No. 1722 W., dated 26th June 1891. Item No. 176, Class A Works, Budget of 1891-92.
	Madura ...	Uthamapalayam.	82	Constructing a bridge on the road from Periyakulam to Cumbum.	36,840	...	18,000	18,840		83	G.O., No. 135 W., dated 16th January 1891. Item No. 178, Class A Works, Budget of 1891-92.
	Do. ...	Veerapandi.	83	Do. do. ...	31,900	...	13,000	18,900		84	G.O., No. 135 W., dated 16th January 1891. Item No. 179, Class A Works, Budget of 1891-92.
				Minor Works	...	...	...	...	1,97,879		
				Total, Communications ...	...	...	...	...	10,000		
						...	...	...	2,07,879		
				Miscellaneous Public Improvements.							
				Minor Works	...	...	...	...	1,500		
				Total, Miscellaneous Public Improvements.	...	...	...	...	1,500		
				Total, Original Works ...	...	...	...	...	13,14,712 / 13,08,535		

GOVERNMENT OF MADRAS.

PART I—CLASS B WORKS.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Amount applied for 1892-93. Amount.	Amount applied for 1892-93. Total.	Item No.	Remarks and References.
				CIVIL BUILDINGS.	Rs.	Rs.	Rs.	Rs.			
				ORIGINAL WORKS.							
				(a) Major Works.							
6. Administration ...	Kistna Western.	Narsaraopet.	1	Taluk office	5,160	-	-	5,160		1	G. O. No: 804 W&J, 10th March 1892
	Bellary ...	Dharmavaram.	2	Do.	...	...	...	5,000		2	Estimate is awaited.
	Do. ...	Gooty ...	3	Do.	...	...	...	10,000		3	Do.
	Kurnool ...	Pattikonda.	4	Do.	...	...	...	10,000		4	Do.
	West Coast.	Tellicherry.	5	Sub-Collector's office	14,850	...	...	10,000		5	Do. G. O. No: 1058 W&J, 4th March 1892
	Do. ...	Calicut ...	6	Tahsildar's and Sub-Magistrate's office.	...	...	...	10,000		6	Do. Estimate is awaited
	Do. ...	Puttur ...	7	Improvements to the General Duty Deputy Collector's office.	3,680	...	...	3,680		7	Sanctioned by the Superintending Engineer.
	Do. ...	Kásaragód.	8	Improvements to the Taluk office ...	...	...	...	10,000		8	Estimate is awaited.
	Do. ...	Tirurangádi.	9	Constructing Sub-jail	...	...	...	2,000		9	Do.
	Do. ...	Alatúr ...	10	Do. do.	...	...	...	2,000		10	Do.
	Tanjore ...	Tanjore ...	11	Collector's office	...	...	...	12,000		11	Do.
	Madura ...	Madura ...	12	Constructing a record-room to the Collector's office for vernacular records in the Tirumal Naick's Palace.	60,708	...	...	40,000		12	Do. G. O. No: 687 W&J, 3rd March 1892
	Do. ...	Mutukulatur.	13	Improvements to the Deputy Tahsildar's office.	...	...	...	3,270		13	Do. Estimate is awaited
	Tinnevelly.	Kokarakulam.	14	Improvements to the English record-room of the Collector's office.	...	...	...	2,500		14	Do.
	Consulting Architect.	Madras ...	15	Constructing quarters for the Bandsmen of His Excellency the Governor.	58,100	...	...	58,100		15	G.O., No. 2292 W., dated 26th August 1891. Item No. 49, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	16	Re-roofing the Banqueting Hall, Government House, with Mangalore tiles over teak planking.	...	...	...	6,000		16	Estimate is awaited.
	Do. ...	Do. ...	17	Constructing permanent roof to the verandah of the Banqueting Hall, Government House.	...	...	...	7,615		17	Estimate is awaited. Item No. 51, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	18	New Stamp office	...	...	...	1,50,000		18	Estimate is awaited. Item No. 50, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	19	Constructing a shoeing shed, Government House.	...	...	...	4,500		19	Estimate is awaited.
8. Law and Justice.	Kistna Western.	Narsaraopet.	20	District Munsif's court	...	...	...	5,000		20	Do.
	Kurnool ...	Nandyál ...	21	Do. do. ...	...	...	...	10,000		21	G.O., No. 200 W., dated 21st January 1892.
	West Coast.	Pálghat ...	22	Vakils' chambers to the Law courts ...	16,700	...	...	10,000		22	Estimate is awaited.
	Do. ...	Karkul ...	23	District Munsif's court	...	...	...	5,000		23	Estimated is awaited. Item No. 60, Class A Works, Budget of 1891-92.
10. Jails	Vizagapatam.	Párvatipur.	24	Additions and alterations to the Hill jail.	...	...	...	10,000		24	Estimate is awaited.
	North Arcot.	Vellore ...	25	Quarantine ward, Central jail	...	...	...	5,650		25	Do. G. O. No: 562 W&J, 28th February 1892
	Tanjore ...	Tanjore ...	26	Constructing 18 warders' huts, District jail.	...	...	...	13,000		26	Estimate is awaited. Item No. 75, Class A Works Budget of 1891-92. G. O. No: 474 W&J, 15th February 1892
	Consulting Architect.	Madras ...	27	Constructing out-offices to the hospital, bath-room, store-room and dead-house, Her Majesty's Penitentiary.	5,325	...	...	4,000		27	Estimate is awaited. Item No. 76, Class A Works, Budget of 1891-92.
						...	...	2,765			

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—CLASS B WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Amount applied for 1892-93. Amount.	Amount applied for 1892-93. Total.	Item No.	Remarks and References.
				CIVIL BUILDINGS—*cont.*		Rs.	Rs.	Rs.			
				ORIGINAL WORKS—*cont.*							
				(*a*) *Major Works.*							
10. Jails—*cont.* ...	Consulting Architect.	Madras ...	28	Improvements and additions to Her Majesty's Penitentiary.	...	...	...	50,000		28	Estimate is awaited.
11. Police ...	Vizagapatam.	Koraput ...	29	Forty-four tiled huts and a boundary wall.	...	...	...	10,000		29	Do.
	Do. ...	Jeypore ...	30	Station-house with two lock-ups ...	...	...	...	3,000		30	Do.
	Do. ...	Do ...	31	Twenty-two tiled huts	...	...	...	7,000		31	Do.
	Godávari Eastern.	Rajahmundry.	32	First-class station-house	...	...	...	3,000		32	Do.
	Bellary ...	Anantapur.	33	Police office	...	...	...	10,000		33	Do.
	North Arcot.	Chittoor ...	34	Converting the old jail into police lines, place-of-arms and police station.	...	...	...	12,000		34	Do.
	Do. ...	Do. ...	35	Upper story to the police office ...	...	...	...	7,000		35	Do.
	Do. ...	Arni ...	36	Converting the old Officers' quarters in the Arni Fort into police line.	...	...	...	2,990		36	Do.
	Do. ...	Rénigunta.	37	Seven huts	...	...	...	3,000		37	Do.
	Salem ...	Tirupatur.	38	Twenty-three huts	...	...	...	6,000		38	Do.
	Do. ...	Do. ...	39	Second-class station-house	...	...	...	3,000		39	Do.
	Do. ...	Vániyambádi	40	Fifteen huts	...	...	...	3,000		40	Do.
	Tanjore ...	Tanjore ...	41	Constructing police huts—2 for European and 9 for Native head constables, and 104 for constables.	...	...	...	10,000		41	Do.
	Do. ...	Kumbakónam.	42	Constructing police huts	...	...	...	12,000		42	Do.
	Madura.	Usilampatti.	43	Eleven tiled huts	...	...	...	2,750		43	Do.
	Tinnevelly.	Palamcottah.	44	Improvements to the Police Superintendent's office.	...	...	...	3,200		44	Do.
	Consulting Architect.	Egmore, Madras.	45	Improvements to the Egmore police station.	...	...	...	2,850		45	Do.
	Do. ...	Madras ...	46	Constructing a police mortuary and enlarging the Wall-tax road police station to provide an inquest room.	4,470	...	...	4,470		46	G.O., No. 271 W., dated 1st February 1892.
				(*b*) *Minor Works.*							
	Salem ...	Yercaud ...	47	Five huts	...	...	...	1,500		47	Sanction to estimate is awaited.
	Do. ...	Do. ...	48	Third-class police station	...	...	...	1,500		48	Do. do.
	Madura ...	Kariaputty.	49	Second-class station-house	...	...	...	1,846		49	Do. do.
	Do. ...	Chikkanuth.	50	Do. do.	...	...	...	2,000		50	Do. do.
	Do. ...	Pandalgudi.	51	Do. do.	...	...	...	2,000		51	Do. do.
	Tinnevelly.	Kalugamalai.	52	Constructing police station	...	...	...	2,300		52	Do. do.

GOVERNMENT OF MADRAS.

PART I—CLASS B WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Amount applied for 1892-93. Amount.	Amount applied for 1892-93. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.			
				CIVIL BUILDINGS—*cont.*							
				ORIGINAL WORKS—*cont.*							
				(*a*) *Major Works*—cont.							
12. Educational ...	Consulting Architect.	Madras ...	53	Providing verandah to the upper and ground floor of the office of the Director of Public Instruction.	...	...	...	10,000		53	Estimate is awaited. Item No. 119, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	54	Constructing rooms for Assistant Professor, Medical College.	...	...	...	2,500		54	Estimate is awaited. Item No. 121, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	55	Constructing macerating room, Medical College.	...	...	...	1,000		55	Estimate is awaited. Item No. 118, Class A Works, Budget of 1891-92.
	Do. ...	Triplicane, Madras.	56	Muhammadan Normal ~~Practising~~ School.	6,000	...	...	6,000		56	Estimate is awaited. G. O. No: 638 W dy 26 Feby 1892
	Do. ...	Madras ...	57	Constructing new Law College. ...	...	...	...	2,00,000		57	~~Do.~~ Estimate is awaited
13. Medical ...	West Coast.	Calicut ...	58	Constructing a store-shed, Lunatic Asylum.	...	...	...	5,650		58	Do.
	Consulting Architect.	Madras ...	59	Constructing Native nurses' quarters and other additions to the Lying-in Hospital.	5,460	...	...	7,000		59	~~Do.~~ G. O. No: 526 W dy 17 Feby 1892
	Do. ...	Do. ...	60	Building 50 huts for native keepers, Lunatic Asylum.	...	...	...	12,690		60	Estimate is awaited. Item No. 124, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	61	Constructing store-room for storing grain, &c., Lunatic Asylum.	8,650	...	...	6,235		61	~~Estimate is awaited.~~ G. O. No: 466 W dy 15-2-92
	Do. ...	Do. ...	62	Constructing a new ward to increase the accommodation, Leper Hospital.	...	...	...	10,000		62	Do. Estimate is awaited
	Do. ...	Do. ...	63	Additions and improvements to out-patients' room, General Hospital.	...	...	...	27,620		63	Estimate is awaited. Item No. 126, Class A Works, Budget of 1891-92.
	Do. ...	Do. ...	64	Store-room for purveyors and firewood godown, General Hospital.	...	...	...	10,000		64	Estimate is awaited.
15. Customs ...	West Coast.	Hungarkatta	65	Constructing a Sea Customs office ...	...	...	...	6,000		65	Do.
	Do. ...	Baindur ...	66	Do. do. ...	...	...	...	6,000		66	Do.
16. Miscellaneous ...	Ganjam ...	Purushottapur.	67	Sub-Registrar's office	...	...	...	2,500		67	Do.
	Kistna Western.	Sattenapalle.	68	Do.	...	...	...	1,000		68	Do.
	West Coast.	Baindur ...	69	Do.	...	...	...	2,500		69	Do.
	Do. ...	Andathode.	70	Do.	...	...	...	500		70	Do.
	South Arcot.	Chidambaram	71	Do.	...	...	...	2,500		71	Do.
	Madura ...	Nattam ...	72	Do.	2,810	...	...	2,500		72	G.O., No. 3308 W., dated 9th December 1891.
	Tinnevelly.	Sivagiri ...	73	Do.	...	...	...	3,000		73	Estimate is awaited.

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

GOVERNMENT OF MADRAS.

PART I—CLASS B WORKS—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ORIGINAL WORKS UNDER PROVINCIAL SERVICES IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Amount of Estimate.	Outlay. Actual to end of 1890-91.	Outlay. Probable during 1891-92.	Amount applied for 1892-93. Amount.	Amount applied for 1892-93. Total.	Item No.	Remarks and References.
					Rs.	Rs.	Rs.	Rs.			
				Communications.							
				(a) *Major Works*—cont.							
1. Metalled roads, raised and bridged.	Ganjam ...	...	74	Ichápur-Jarada road	30,000	5,510	18,000	6,000		74	G.O., No. 203 W., dated 21st January 1892. Item No. 174, Class A Works, Budget of 1891-92.
	Do. ...	...	75	Constructing road from Kallikót to Boirani *viâ* Atagadá.	...	6,525	400	20,000		75	Estimate is awaited. Item No. 172, Class A Works, Budget of 1891-92.
	Vizagapatam.	...	76	Extension of road from Koraput to Nowrangapur.	...	...	...	20,000		76	Estimate is awaited.
	West Coast.	...	77	Improving the Chundale and Mysore frontier road.	...	...	...	50,000		77	Do.

GOVERNMENT OF MADRAS.

PART II.

DETAIL OF THE BUDGET-ESTIMATE OF MINOR ORIGINAL WORKS UNDER CIVIL WORKS IN MADRAS FOR THE YEAR 1892–93.

Head of Classification.	Executive Division.	Locality.	Items.	Estimate, 1892–93. Amount.	Estimate, 1892–93. Total.	Estimate, 1891–92. Amount.	Estimate, 1891–92. Total.
				Rs.	Rs.	Rs.	Rs.
			Civil Buildings.				
	Ganjam ...	...	Minor works	1,500			
	Vizagapatam.	...	Do.	3,000			
	Godávari Eastern.	...	Do.	2,000			
	Godávari Western.	...	Do.	200			
	Nellore ...	...	Do.	1,200			
	Bellary ...	...	Do.	2,000			
	Cuddapah ...	...	Do.	500			
	Kurnool ...	...	Do.	200			
	Coimbatore ...	...	Do.	12,000			
	West Coast ...	...	Do.	2,000			
	North Arcot ...	...	Do.	4,000			
	South Arcot ...	...	Do.	500			
	Chingleput ...	...	Do.	3,000			
	Public Works Workshops.	...	Do.	1,000			
	Public Works Stores.	...	Do.	500			
	Tanjore ...	...	Do.	1,500			
	Negapatam ...	...	Do.	1,000			
	Trichinopoly...	...	Do.	500			
	Madura ...	...	Do.	500			
	Tinnevelly ...	...	Do.	500			
	Architect ...	...	Do.	20,000			
	Military Works Department.	...	Do.	900			
			Total, Civil Buildings.		58,500	...	84,097
			Communications.				
	Ganjam ...	...	Minor works	5,000			
	Coimbatore ...	...	Do.	3,000			
	West Coast ...	...	Do.	2,000			
			Total, Communications.		10,000	...	9,000
			Miscellaneous Public Improvements.				
	Coimbatore ...	...	Minor works	1,500			
			Total, Miscellaneous Public Improvements.		1,500	...	3,500
			Grand Total, Minor Works		70,000	...	96,597

GOVERNMENT OF MADRAS.

PART II—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR REPAIRS TO CIVIL WORKS IN MADRAS FOR THE YEAR 1892–93.

Head of Classification.	Executive Division.	Locality.	Items.	Estimate, 1892–93. Amount.	Estimate, 1892–93. Total.	Estimate, 1891–92. Amount.	Estimate, 1891–92. Total.
				Rs.	Rs.	Rs.	Rs.
			Civil Buildings.				
	Ganjam ...	...	Annual repairs	2,000			
	Vizagapatam.	...	Do.	5,000			
	Godávari Eastern.	...	Do.	4,000			
	Godávari Western.	...	Do.	1,000			
	Kistna Eastern.	...	Do.	3,000			
	Kistna Western.	...	Do.	1,000			
	Nellore ...	...	Do.	2,000			
	Bellary ...	...	Do.	5,000			
	Cuddapah ...	...	Do.	2,000			
	Kurnool ...	...	Do.	3,000			
	Coimbatore ...	...	Do.	~~23,000~~ 20000 8,000 3000			
	West Coast ...	...	Do.	5,000			
	North Arcot...	...	Do.	1,710			
	South Arcot ...	...	Do.	15,000			
	Chingleput ...	...	Do.	1,500			
	Public Works Workshops.	...	Do.	450			
	Public Works Stores.	...	Do.	4,000			
	Tanjore ...	...	Do.	1,200			
	Negapatam ..	...	Do.	1,000			
	Trichinopoly.	...	Do.	6,000			
	Madura ...	...	Do.	1,500			
	Tinnevelly ...	...	Do.	65,000			
	Architect ...	...	Do.	3,330			
	Military Works Department.	...	Do.	5,000			
	Reserve with the Government for the conservation of archæological works.	...					
			Total, Civil Buildings.		1,69,690	...	2,00,270
			Communications.				
	Ganjam ...	...	Annual repairs	5,000			
	Vizagapatam.	...	Do.	12,000			
	Bellary ...	...	Do.	4,700			
	Coimbatore ...	...	Do.	30,000			
	West Coast ...	...	Do.	50,000			
	Consulting Architect.	...	Do.	13,500			
			Total, Communications.		1,15,200	...	1,06,200

GOVERNMENT OF MADRAS.

PART II—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR REPAIRS TO CIVIL WORKS IN MADRAS FOR THE YEAR 1892-93—continued.

Head of Classification.	Executive Division.	Locality.	Items.	Estimate, 1892-93. Amount.	Estimate, 1892-93. Total.	Estimate, 1891-92. Amount.	Estimate, 1891-92. Total.
				Rs.	Rs.	Rs.	Rs.
			Miscellaneous Public Improvements.				
	Godávari Eastern:	...	Annual repairs ...	300			
	Kistna Eastern.	...	Do.	500			
	Coimbatore ...	...	Do.	4,000			
	Architect ...	...	Do.	10,310			
			Total, Miscellaneous Public Improvements.		15,110	...	13,530
			Total, Repairs ...		3,00,000	...	3,20,000

GOVERNMENT OF MADRAS.

PART III.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT UNDER PROVINCIAL SERVICES IN THE MADRAS PRESIDENCY FOR 1892-93.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		EXECUTIVE BRANCH.						
		Engineer Establishment.						
		Chief Engineers.						
1	1	Chief Engineer, 1st Class, and Secretary to Government, Public Works Department.	2,500	2,500				
1	1	Chief Engineer, 2nd Class, and Joint Secretary to Government, Irrigation Branch.	2,000	2,000				
		Military pay and allowances.	...	243½				
2	2	Total, Chief Engineers ...	...	4,743½	56,922	...	56,922	
		Superintending Engineers.						
2	2	Superintending Engineers, 1st Class.	1,600	3,200				
3	3*	Superintending Engineers, 2nd Class.	1,350	4,050				* Includes provision for Mr. Irwin, Consulting Architect to Government.
2	2	Superintending Engineers, 3rd Class.	1,100	2,200				
		Military pay and allowances inclusive of local allowances for Superintendent of Works, Periyár project.	...	788				
7	7	Total, Superintending Engineers.	...	10,238	1,22,856	...	1,28,772	
		Executive Engineers.						
11	11	Executive Engineers, 1st Grade.	950	10,450				
10	11	Executive Engineers, 2nd Grade.	800	8,800				
12	12	Executive Engineers, 3rd Grade.	700	8,400				
5	4	Executive Engineers, 4th Grade.	600	2,400				
		Carried over ...	...	30,050	1,79,778	...	1,85,694	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	30,050	1,79,778	...	1,85,694	
		EXECUTIVE BRANCH —*cont.*						
		ENGINEER ESTABLISHMENT —*cont.*						
		Executive Engineers—cont.						
		Add one Executive Engineer, 3rd Grade (Mr. C. J. K. Watson).	700	700				
		Military pay and allowances, including higher rate of pay granted to Colonel Ross Thompson, R.E.	...	2,258				
38	38	Total, Executive Engineers.	...	33,008	3,96,096	...	3,90,210	
		Assistant Engineers.						
31	31	Assistant Engineers, 1st Grade.	500	15,500				
6	6	Assistant Engineers, 2nd Grade.	350 & 250	1,900				
		Military pay and allowances.	...	190				
37	37	Total, Assistant Engineers.	...	17,590	2,11,080	...	2,11,080	
84	84	Total, Engineer Establishment.	...	...	7,86,954	...	7,86,984	
		Deduct— On account of absentees.	...	...	1,19,232	...	1,18,595	
		Net Total, Engineer Establishment.	...	...	6,67,722	...	6,68,389	
		UPPER SUBORDINATE ESTABLISHMENT.						
		Sub-Engineers.						
9	9	Sub-Engineers, 1st Grade...	400	3,600				
8	8	Do. 2nd do. ...	300	2,400				
17	17	Do. 3rd do. ...	250	4,250				
		Military pay and allowances, including additional pay sanctioned for Messrs. Ottmann, Baker and Ellis.	...	685				
34	34	Total, Sub-Engineers ...	...	10,935	1,31,220	...	1,30,020	
		Carried over ...	...	...	1,31,220	...	1,30,020	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	...	1,31,220	...	1,30,020	
		EXECUTIVE BRANCH —*cont.*						
		UPPER SUBORDINATE ESTABLISHMENT—*cont.*						
		Supervisors.						
21	21	Supervisors, 1st Grade ...	200	4,200				
35	35	Do. 2nd do. ...	150	5,250				
		Military pay and allowances.	...	244				
56	56	Total, Supervisors ...	...	9,694	1,16,328	...	1,16,616	
		Overseers.						
42	43	Overseers, 1st Grade ...	100	4,300				
26	27	Do. 2nd do. ...	80	2,160				
20	19	Do. 3rd do. ...	60	1,140				
		Military pay and allowances.	...	428				
88	89	Total, Overseers ...	...	8,028	96,336	...	94,020	
		Apprentices.						
...	2	Apprentice Overseer, 1st Grade.	80	160	1,920	...	...	
		Sub-divisional allowance to 51 Upper Subordinates.	30	1,530	18,360	...	19,800	
		Maintenance allowance of students of Civil Engineering College during practical year of training.	...	190	2,280	...	5,100	
178	181	Total, Upper Subordinate Establishment.	...	...	3,66,444	...	3,65,556	
		Deduct— On account of absentees.	...	...	19,656	...	20,000	
		Net Total, Upper Subordinate Establishment.	...	...	3,46,788	...	3,45,556	
		LOWER SUBORDINATE ESTABLISHMENT.						
16	16	Sub-Overseers, 1st Grade...	50,55&60	825				
11	9	Do. 2nd do. ...	35 & 40	325				
8	8	Do. 3rd do. ...	25 & 30	205				
35	33	Total, Lower Subordinate Establishment.	...	1,355	16,260	...	17,040	
		Carried over ...	...	...	...	...	...	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	...	...	...	...	
		EXECUTIVE BRANCH —*cont.*						
		PETTY ESTABLISHMENT.						
		Store Establishment.						
1	1	Storekeeper	100	100				
1	1	Do.	50	50				
2	2	Do.	40	40				
8	8	Do.	30	60				
6	6	Do.	25	200				
3	4	Do.	20	120				
1	1	Do.	15	60				
1	1	Store Writer	12	12				
7	7	Store Watchers	25	25				
			7	49				
31	32	Total, Store Establishment.	...	716	8,592	...	8,412	
		Workshop Establishment (Presidency and Dowlaishweram).						
1	1	Maistry	50	50				
2	2	Maistries	30	60				
1	1	Foreman, Instruments ...	80–120	100				
1	1	Engraver	30	30				
1	1	Gatekeeper	10	10				
2	2	Attenders	10	20				
2	2	Boys	4	8				
10	10	Total, Petty Establishment (Presidency and Dowlaishweram).	...	278	3,336	...	3,336	
		Nellore.						
...	1	Foreman	20	20				
...	1	Assistant Storekeeper ...	16	16				
..	1	Engine lascar	5	5				
...	1	Sweeper	4	4				
...	4	Total, Workshop Establishment, Nellore.	...	45	540	...	...	
		Carried over ...	...	...	12,468	...	11,748	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	...	12,468	...	11,748	
		EXECUTIVE BRANCH —*cont.*						
		Workshop Establishment—cont.						
		Bezváda						
...	1	Workshop Superintendent.	130	130				
...	1	Storekeeper	20	20				
...	1	Assistant Storekeeper ...	15	15				
...	2	Lascars	6	12				
...	5	Total, Workshop Establishment, Bezváda.	...	177	2,124	...	...	
		Medical Establishment.						
...	1	Medical Subordinates ...	75	75				
2	1	Do. do. ...	55	55				
1	...	Do. do. ...	50	...				
2	2	Do. do. ...	35	70				
...	1	Do. do. ...	25	25				
		Charge allowance 1 at 50, 2 at 25 and at 15.	...	115				
3	3	Hospital servants 1 at 7, 1 at 6 and 1 at 4.	...	17				
8	8	Total, Medical Establishment.	...	357	4,284	...	4,044	
		Telegraph Establishment.						
1	1	Signaller	25	25				
1	1	Do.	20	20				
1	1	Do.	15	15				
2	2	Telegraph peons	6	12				
5	5	Total, Telegraph Establishment.	...	72	864	...	864	
		Lascars, Sweepers, &c.						
500	500	Lascars	6	3,000				
5	6	Sweepers	2 at 5 4 at 4	26				
505	506	Total, Lascars, &c...	...	3,026	36,312	...	36,264	
		Carried over ...	...	...	56,052	...	52,920	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 56,052 52,776	Rs. ...	Rs. 52,920	
		EXECUTIVE BRANCH —*cont.*						
		IRRIGATION ESTABLISHMENT.						
		Godávari Delta System.						
1	1	Anicut Superintendent ...	120	120				
1	1	Do. Maistry	18	18				
1	1	Do. do.	15	15				
3	...	Clerks	12	12				
1	...	Irrigation Writer	15	...				
1	...	Shroff	15	...				
...	4	Clerks, V Class, 1st Grade.	10	...				
...	1	Clerk, do. 2nd do.	15—20	70				
3	3	Delta Superintendent ...	10—15	12½				
1	1	Do. do. ...	80	240				
1	1	Do. do. ...	70	70				
9	9	Do. do. ...	60	60				
12	12	Do. do. ...	55	495				
6	6	Do. do. ...	40	480				
1	1	Peon	8	48				
3	3	Peons	6	6				
39	39	Lascars	5	15				
75	75	Do.	6	234				
			5	375				
159	159	Total, Water Regulation Establishment, Godávari Delta System.	...	2,270½	27,246	...	27,096	
		IRRIGATION CONSERVANCY ESTABLISHMENT.						
		Navigation Establishment.						
1	1	Boat Superintendent ...	75	75				
2	2	Lock Superintendents ...	15	30				
18	18	Do. do. ...	12	216				
24	24	Do. do. ...	10	240				
1	1	Do. Superintendent ...	9	9				
11	11	Do. Superintendents ...	8	88				
147	147	Do. Lascars do. ...	6	882				
87	87	Do. do. ...	5	435				
291	291	Total, Navigation Establishment, Godávari Delta System.	...	1,975	23,700	...	23,700	
		Carried over ...	...	...	1,06,998 1,03,722	...	1,03,716	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 1,06,998 1,03,722	Rs. ...	Rs. 1,03,716	
		EXECUTIVE BRANCH —*cont.*						
		IRRIGATION CONSERVANCY ESTABLISHMENT—*cont.*						
		GODAVARI DISTRICT.						
		Head and Tail Locks at Dumagudem.						
1	1	Superintendent	17	17	204	...	204	
		Kistna Delta System.						
1	1	Anicut Superintendent ...	140	140				
1	1	Assistant do. ...	40	40				
1	1	Clerk, V Class, 1st Grade.	15—20	17½				
1	1	Irrigation Clerk, V Class, 1st Grade.	15—20	17½				
1	1	Do. do. 2nd Grade.	10—15	12½				
3	3	Delta Superintendents ...	70	210				
6	6	Do. do. ...	55	330				
8	8	Do. do. ...	40	320				
19	19	Lascars	8	152				
19	19	Do.	7	133				
29	29 35	Do.	6	174 210				
30	30 25	Do.	5	150 130				
119	119	Total, Water Regulation Establishment, Kistna Delta System.	...	1,696½ 1702½	20,358 20,430	...	20,358	
1	1	Boat Superintendent ...	50	50				
3	3	Lock Superintendents ...	15	45				
9	9	Do. do. ...	12	108				
14	14	Do. do. ...	10	140				
15	15	Do. do. Lock Lascars ...	8	120				
20	20	Do. do. ...	7	140				
26	26	Do. do. ...	6	156				
23	23	Do. do. ...	5	115				
2	2	Traffic Clerks	12	24				
1	1	Boat Clerk, 5th Class, 1st Grade.	15—20	17½				
114	114	Total, Navigation Establishment, Kistna Delta System.	...	915½	10,986	...	10,986	
		Carried over ...	...	...	1,38,546 1,35,342	...	1,35,264	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,38,546~~ 1,35,342	Rs. ...	Rs. 1,35,264	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation Conservancy Establishment —*cont.*						
		Pennér Anicut System.						
		Water Regulation Establishment.						
1	1	Delta Superintendent ...	70	70				
1	1	Anicut do. ...	60	60				
1	1	Clerk, V Class, 1st Grade.	15-20	17½				
1	1	Do. do. 2nd do.	10-15	12½				
1	1	Lascar	7	7				
17	17	Lascars	6	102				
4	4	Do.	5	20				
26	26	Total, Water Regulation Establishment, Pennér Anicut System.	...	289	3,468	...	3,468	
		Cauvery Delta System.						
1	1	Superintendent	75	75				
1	1	Do.	50	50				
1	1	Do.	30	30				
1	1	Do.	25	25				
1	1	Anicut Superintendent ...	25	25				
3	3	Superintendents	20	60				
9	9	Do.	15	135				
4	4	Do.	10	40				
1	1	Superintendent	8	8				
3	3	Lascars	8	24				
17	17	Do.	7	119				
39	39	Do.	6	234				
89	89	Do.	5	445				
31	31	Do.	4	124				
1	1	Sweeper	5	5				
202	202	Total, Water Regulation Establishment, Cauvery Delta System.	...	1,399	16,788	...	16,788	
		Carried over ...	...	...	~~1,58,802~~ 1,55,598	...	1,55,520	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,58,802~~ 1,55,598	Rs. ...	Rs. 1,55,520	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation Conservancy Establishment—*cont.*						
		Navigation Establishment.						
1	1	Lascar	7	7				
1	1	Do.	5	5				
2	2	Total, Navigation Establishment, Cauvery Delta System.	...	12	144	...	144	
		Srivaikuntham Anicut System.						
		Water Regulation Establishment.						
2	2	Superintendents	30	60				
1	1	Superintendent	12	12				
21	21	Lascars	5	105				
24	24	Total, Water Regulation Establishment, Srivaikuntham Anicut System.	...	177	2,124	...	2,124	
		Chembrambakam Tank.						
		Water Regulation Establishment.						
~~1~~	~~1~~	~~Superintendent~~	~~14~~	~~14~~				
1	1	Superintendent	12	~~12~~				
1	1	Do.	10½	10½				
2	2	Lascars	6	12				
5	5	Do.	5	25				
9	9	Total, Water Regulation Establishment, Chembrambakam Tank.	...	~~50½~~ 61½	~~714~~ 738	...	714	
		Madras Water-supply and Irrigation Project.						
1	1	Superintendent	25	25				
1	1	Do.	15	15				
4	4	Lascars	7	28				
2	2	Do.	6	12				
4	4	Do.	5	20				
12	12	Total, Madras Water-supply and Irrigation Project.	...	100	1,200	...	1,200	
		Carried over ...	...	...	~~1,62,984~~ 1,59,802	...	1,59,702	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,62,984~~ 1,59,804	Rs. ...	Rs. 1,59,702	
		EXECUTIVE BRANCH —*cont.*						
		IRRIGATION CONSERVANCY ESTABLISHMENT—*cont.*						
		Pálár Anicut System.						
		Water Regulation Establishment, Chingleput District.						
1	1	Maistry	20	20				
2	2	Lascars	6	12				
12	12	Do.	4	48				
15	15		...	80	...	...	...	
		North Arcot District.						
...	1	Superintendent	35	35				
...	1	Do.	30	30				
1	...	Do.	25	...				
...	5	Superintendents	20	100				
1	1	Superintendent	15	15				
3	...	Superintendents	12	...				
...	1	Head Lascar	10	10				
...	1	Lascar	8	8				
20	30	Lascars	5	150				
25	40		...	348	...	...	...	
40	55	Total, Water Regulation Establishment, Pálár Anicut System.	...	428	5,136	...	3,072	
		Pelandorai Anicut System.						
1	1	Superintendent	30	30				
1	1	Lascar	8	8				
2	2	Lascars	6	12				
7	7	Do.	5	35				
11	11	Total, Water Regulation Establishment, Pelandorai Anicut System.	...	85	1,020	...	1,020	
		Barúr Project.						
1	1	Anicut Superintendent ...	35	35				
4	7	Lascars	6	42				
5	8	Total ...	...	77	924	...	708	
		Carried over ...	...	...	~~1,70,064~~ 1,66884	...	1,64,502	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,70,064~~ 1,66,884	Rs. ...	Rs. 1,64,502	
		EXECUTIVE BRANCH —*cont.*						
		IRRIGATION AND NAVIGATION WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.						
		Water Regulation Establishment.						
		Ganjam District.						
4	4	Lascars	7	28				
1	1	Lascar	6	6				
10	10	Lascars	4	40				
1	1	Lascar	3½	3½				
16	16	Total, Water Regulation Establishment, Ganjam District.	...	77½	930	...	930	
		North Arcot District.						
1	1	Superintendent	27	27				
2	2	Superintendents	20	40				
1	1	Superintendent	12	12				
1	1	Do.	10	10				
1	1	Allowance	6	~~30~~ 36				
5	5	Lascars ... ... for 4 ...	5	~~75~~ 50				
15	~~15~~ 10	Do. ... ... Anicut allowance for 8						
25	25	Total, Water Regulation Establishment, North Arcot District.	...	194	2,328	...	2,328	
		Coimbatore District.						
1	1	Superintendent	5	5				
4	4	Lascars	2½	10				
5	5	Total, Water Regulation Establishment, Coimbatore District.	...	15	180	...	180	
		Carried over ...	...	...	~~1,73,502~~ 1,74,322	...	1,67,940	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 1,73,502 1,70,922	Rs. ...	Rs. 1,67,940	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept—*cont.*						
		Water Regulation Establishment—cont.						
		Malabar District.						
1	1	Watchman	4	4				
1	1	Do.	3	3				
		Additional amount sanctioned.	...	11½				
2	2	Total, Water Regulation Establishment, Malabar District.	...	18½	222	...	222	
		Tanjore District.						
1	1	Superintendent	50	50				
2	2	Lascars	6	12				
6	6	Do.	5	30				
9	9	Total, Water Regulation Establishment, Tanjore District.	...	92	1,104	...	1,104	
		Vizagapatam District.						
3	3	Superintendents	12	36				
13	13	Lascars	5	65				
16	16	Total, Water Regulation Establishment, Vizagapatam District.	...	101	1,212	...	1,212	
		Godávari District.						
1	1	Lascar	9	9				
1	1	Do.	7	7				
2	2	Total, Water Regulation Establishment, Godávari District.	...	16	192	...	192	
		Carried over ...	...	...	~~1,76,232~~ 1,73,052	...	1,70,670	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,76,232~~ 1,73,052	Rs. ...	Rs. 1,70,670	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept—*cont.*						
		Water Regulation Establishment—cont.						
		Chingleput District.						
1	1	Superintendent	10½	10½				
1	1	Lascar	6	6				
1	1	Do.	5	5				
3	3	Total, Water Regulation Establishment, Chingleput District.	...	21½	258	...	258	
		South Arcot District.						
1	1	Superintendent	40	40				
2	2	Superintendents	35	70				
1	1	Superintendent	25	25				
2	2	Superintendents	20	40				
10	10	Lascars	8	80				
9	9	Do.	6	54				
32	32	Do.	5	160				
57	57	Total, Water Regulation Establishment, South Arcot District.	...	469	5,628	...	5,628	
		Trichinopoly District.						
1	1	Superintendent	15	15				
1	1	Do.	12	12				
2	2	Superintendents	10	20				
1	...	Lascar	6	...				
5	3	Lascars	5	1				
18	18	Do.	4	72				
4	4	Do.	3	12				
32	29	Total, Water Regulation Establishment, Trichinopoly District.	...	146	1,752	...	1,944	
		Carried over ...	...	...	~~1,83,870~~ 1,80,690	...	1,78,500	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,83,870~~ 1,80,690	Rs. ...	Rs. 1,78,500	
		EXECUTIVE BRANCH —*cont.*						
		Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept—*cont.*						
		Water Regulation Establishment—cont.						
		Madura District.						
4	4	Lascars	4	16				
4	4	Total, Water Regulation Establishment, Madura District.	...	16	192	...	192	
		Tinnevelly District.						
1	1	Superintendent	20	20				
5	5	Superintendents	15	75				
1	1	Lascar	8	8				
7	7	Lascars	7	49				
15	15	Do.	6	90				
23	23	Do.	5	115				
52	52	Total, Water Regulation Establishment, Tinnevelly District.	...	357	4,284	...	4,284	
		Navigation Establishment.						
		South Arcot District.						
1	1	Superintendent	15	15				
1	1	Do.	10	10				
1	1	Lascar	8	8				
7	7	Lascars	5	35				
10	10	Total, Navigation Establishment, South Arcot District.	...	68	816	...	816	
		Carried over ...	...	...	~~1,89,162~~ 1,85,982	...	1,83,792	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,89,162~~ 1,85,982	Rs. ...	Rs. 1,83,792	
		EXECUTIVE BRANCH —*cont.*						
		Agricultural Works, River Conservancy Establishment.						
		Godávari District.						
2	2	Superintendents	15	30				
8	8	Lascars	6	48				
10	10	Total, River Conservancy Establishment, Godávari District.	...	78	936	...	936	
		South Arcot District.						
1	1	Sluice-keeper	8	8				
3	3	Lascars	8	24				
6	6	Do.	5	30				
10	10	Total, River Conservancy Establishment, South Arcot District.	...	62	744	...	744	
		Trichinopoly District.						
2	2	Lascars	7	14				
20	20	Do.	4	80				
4	4	Do.	3	12				
10	10	Do.	2½	25				
36	36	Total, River Conservancy Establishment, Trichinopoly District.	...	131	1,572	...	1,572	
		Tinnevelly District.						
1	1	Lascar	7	7				
4	4	Lascars	2	8				
5	5	Total, River Conservancy Establishment, Tinnevelly District.	...	15	180	...	180	
		Carried over ...	...	...	~~1,92,594~~ 1,89,414	...	1,87,224	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 1,92,594 1,89,414	Rs. ...	Rs. 1,87,224	
		EXECUTIVE BRANCH —*cont.*						
		Conservancy Establishment, Kurnool Canal.						
3	3	Irrigation Superintendents.	65,55&45	165				
4	4	Anicut do.	1 at 25 1 at 20	75				
10	10	Head Lascars	2 at 15					
15	15	Do.	8	80				
17	17	Do.	7	105				
13	13	Do.	6	102				
3	3	Lascars for Irrigation Superintendents.	5 6	65 18				
65	65	Total, Irrigation, Kurnool Canal.	...	610	...	...	...	
		Navigation Establishment.						
4	4	Lock Superintendents ...	15	60	...	...	...	
4	4	Total, Navigation Establishment, Kurnool Canal.	...	60	...	...	...	
69	69	Total, Irrigation and Navigation Establishment, Kurnool Canal.	...	670	8,040	...	8,040	
		Conservancy Establishment, Sangam Project, Nellore District.						
1	1	Anicut Superintendent ...	60	60				
1	1	Delta do. ...	60	60				
1	1	Channel do. ...	40	40				
1	1	Do. do. ...	25	25				
2	2	Clerks, 5th Class, 1st Grade.	15—20	35				
2	2	Do. 5th „ 2nd „	10—15	25				
1	1	Tank Superintendent ...	15	15				
2	2	Lascars	8	16				
5	5	Do.	7	35				
20	20	Do.	6	120				
36	36	Total, Conservancy Establishment, Sangam Project.	...	431	5,172	...	5,172	
		Total, Petty Establishment.	...	...	2,05,806 2,02,626	...	2,00,436	
		Carried over ...	...	...	...	...	...	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment.						
		For Chief Engineer and Secretary to Government, Public Works Department.						
1	1	Chief Assistant	600	600				
1	1	Second do.	300	300				
2	2	Clerks, 1st Class, 3rd Grade.	200—250	450				
1	1	Clerk, 2nd „ 2nd „	120—160	140				
2	2	Clerks, 2nd „ 3rd „	100—120	220				
3	3	Do. 3rd „ 1st „	80—100	270				
2	2	Do. 3rd „ 2nd „	60—80	140				
4	4	Do. 3rd „ 3rd „	50—60	220				
3	3	Do. 4th „ 1st „	40—50	135				
3	3	Do. 4th „ 2nd „	30—40	105				
3	3	Do. 4th „ 3rd „	20—30	75				
1	1	Draftsman, Special ...	200—250	225				
1	1	Do. do. ...	80—100	90				
4	4	Attenders	15, 13, 12 & 10	50				
			14	14				
1	1	Muchi	12	12				
1	1	Do.	10	10				
1	1	Press Messenger	15	15				
1	1	Duffadar	10	10				
1	1	Head Peon	8	40				
5	5	Peons, 1st Class	7	28				
4	4	Do. 2nd „						
45	45	Total ...	...	3,149	...	...	...	
		Drawing Branch attached to the Chief Engineer's Office.						
1	1	Head Draftsman	150	150				
1	1	2nd do.	100	100				
1	1	3rd do.	50	50				
1	1	4th do.	20	20				
4	4	Total ...	...	320				
49	49	Total, Public Works Secretariat Establishment.	...	3,469	41,628	...	41,628	
		Carried over ...	...	...	41,628	...	41,628	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	...	41,628	...	41,628	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For Chief Engineer and Joint Secretary to Government, Irrigation Branch.						
2	2	Clerks, 1st Class, 3rd Grade.	200—250	450				
1	1	Clerk, 2nd „ 3rd „	100—120	110				
2	2	Clerks, 3rd „ 1st „	80—100	180				
2	2	Do. 3rd „ 2nd „	60— 80	140				
1	1	Clerk, 3rd „ 3rd „	50— 60	55				
3	3	Clerks, 4th „ 1st „	40— 50	135				
3	3	Do. 4th „ 2nd „	30— 40	105				
1	1	Clerk, 4th „ 3rd „	20— 30	25				
1	1	Draftsman, 1st Class ...	50— 70	60				
2	2	Draftsmen, 2nd „ ...	35— 50	85				
2	2	Do. 3rd „ ...	20— 30	50				
1	1	Reference Picker		15				
1	1	Do. do.		15				
1	1	Muchi		12				
1	1	Duffadar		12				
1	1	Head Peon		10				
1	1	Messenger		8				
2	2	Messengers		8				
1	1	Messenger		7				
3	3	Lascars		6				
				7				
32	32	Total, Office Establishment for Chief Engineer for Irrigation.	...	1,501	18,012	...	18,012	
		For Six Superintending Engineers' Offices.						
1	1	Clerk, 2nd Class, 1st Grade.	160—200	180				
1	1	Do. 2nd „ 3rd „	100—120	110				
1	1	Do. 3rd „ 3rd „	50— 60	55				
1	1	Do. 4th „ 1st „	40— 50	45				
1	1	Do. 4th „ 2nd „	30— 40	35				
2	2	Clerks, 4th „ 3rd „	20— 30	50				
1	1	Draftsman, Special ...	80—100	90				
1	1	Do. 1st Class ...	50— 70	60				
1	1	Do. 2nd „ ...	35— 50	42½				
		Carried over ...	...	667½ 692½	59,640	...	59,640	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	667½ 692½	59,640	...	59,640	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For Six Superintending Engineers' Offices—cont.						
1	1	Messenger	8	8				
3	3	Messengers	6	18				
14	14	Total for each office ...	...	718½ 693½ 6	...	...	...	
6	6							
84	84		...	4,161 4,311	...	...	...	
		Add extra pay granted to 2 special Draftsmen in Superintending Engineers' offices, I and II Circles	30	60	...	...	...	
84	84	Total for six offices ...	...	4,221 4,311	50,652 51,732	...	49,932	
		For Godávari Eastern Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
1	1	Clerks, 4th „ 1st „	40—50	90				
2	2	Clerk, 4th „ 2nd „	30—40	35				
1	1	Cashier (Clerk, 4th Class, 2nd Grade).	30—40	35				
1	1	Clerks, 4th Class, 3rd Grade	20—30	75				
3	3	Draftsman, 1st Class ...	50—70	60				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
12	12	Total, Office Establishment, Godávari Eastern Division.	...	403	4,836	...	4,836	
		For Kistna Eastern Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
1	1	Do. 4th „ 1st „	40—50	45				
1	1	Do. 4th „ 2nd „	30—40	35				
1	1	Do. 4th „ 3rd „	20—30	75				
3	3	Clerks, 4th „ 3rd „						
		Carried over ...	...	225	1,15,128 1,16,208	...	1,14,408	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. 225	Rs. ~~1,15,128~~ 1,16,208	Rs. ...	Rs. 1,14,408	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For Kistna Eastern Division —cont.						
1	1	Cashier (Clerk, 4th Class, 3rd Grade).	20—30	25				
1	1	Draftsman, 1st Class ...	50—70	60				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
11	11	Total, Office Establishment, Kistna Eastern Division.	...	348	4,176	...	4,176	
		For Ganjam Division.						
1	1	Clerk, 3rd Class, 3rd Grade.	50—60	55				
1	1	Do. 4th „ 2nd „	30—40	35				
2	2	Clerks, 4th „ 3rd „	20—30	50				
1	1	Clerk (Cashier), 4th Class, 2nd Grade.	30—40	35				
1	1	Draftsman, 2nd Class ...	35—50	42½				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
9	9	Total, Office Establishment, Ganjam Division.	...	255½	3,066	...	3,066	
		For Godávari Western Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
2	2	Clerks, 4th „ 1st „	40—50	90				
2	2	Do. 4th „ 2nd „	30—40	70				
1	1	Clerk (Cashier), 4th Class, 2nd Grade.	30—40	35				
3	3	Clerks, 4th Class, 3rd Grade.	20—30	75				
1	1	Clerk, 5th „ 1st „	15—20	17½				
1	1	Draftsman, 1st Class ...	50—70	60				
2	2	Draftsmen, 3rd „ ...	20—30	50				
1	1	Messenger	7	7				
1	1	Do.	6	6				
15	15	Total, Office Establishment, Godávari Western Divn.	...	480½	5,766	...	5,766	
		Carried over ...	...	...	~~1,28,186~~ 1,29,216	...	1,27,416	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 1,28,136 1,29,216	Rs. ...	Rs. 1,27,416	
		EXECUTIVE BRANCH —*cont.*						
		Office Establishment —*cont.*						
		For eight First-class Divisions (*a*)						(*a*) 1. Kistna Western division. 2. South Arcot division. 3. Buckingham Canal division. 4. Tanjore division. 5. Tinnevelly division. 6. Coimbatore division. 7. West Coast division. 8. Nellore division.
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
1	1	Do. 4th „ 1st „	40—50	45				
1	1	Do. 4th „ 2nd „	30—40	35				
2	2	Clerks, 4th „ 3rd „	20—30	50				
1	1	Draftsman, 1st Class ...	50—70	60				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
9	9	Total for each office ...	...	298				
8	8		...	8				
72	72	Total for eight offices ...	...	2,384				
		Add difference of pay between 2nd and 3rd class draftsman for West Coast Division.	...	17½				
		Total ...	...	2,401½	28,818	...	28,818	
		For Rushikulya Division.						
1	1	Clerk, 3rd Class, 3rd Grade.	50—60	55				
1	1	Do. (Cashier) 4th class 2nd Grade.	30—40	35				
3	3	Clerks, 4th Class, 3rd Grade.	20—30	75				
1	1	Draftsman, 1st Class ...	50—70	60				
1	1	Do. 3rd „ ...	20—30	30				
1	1	Messenger	7	7				
1	1	Do.	6	6				
9	9	Total, Office Establishment, Rushikulya Division.	...	268	3,216	...	3,156	
		Carried over ...	...	...	~~1,60,170~~ 1,61,250	...	1,59,390	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,60,170~~ 1,61,250	Rs. ...	Rs. 1,59,390	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT —*cont.*						
		For Kurnool Division.						
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	79				
1	1	Do. 3rd „ 3rd „	50—60	55				
1	1	Do. 4th „ 1st „	40—50	45				
2	2	Clerks, 4th „ 3rd „	30—40	35				
1	1	Draftsman, 1st Class ...	20—30	50				
1	1	Do. 2nd „ ...	50—70	60				
1	1	Do. 3rd „ ...	35—50	42½				
2	2	Messengers	20—30	25				
1	1	Messenger	7	14				
			6	6				
12	12	Total, Office Establishment, Kurnool Division.	...	402½	4,830	...	4,830	
		For seven Second-class Divisions (a)						(a) 1. Cuddapah division. 2. North Arcot do. 3. Chingleput do. 4. Trichinopoly do. 5. Negapatam do. 6. Madura do. 7. Bellary do.
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
1	1	Do. 4th „ 2nd „	30—40	35				
2	2	Clerks, 4th „ 3rd „	20—30	50				
1	1	Draftsman, 1st Class ...	50—70	60				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
8	8	Total for each division ...	...	253				
7	7			7				
56	56	Total for seven offices ...	...	1,771				
		Add—						
1	1	Clerk, 4th Class, 3rd Grade, for North Arcot division.	20—30	25				
1	1	Do. for Bellary division.	20—30	25				
58	58	Total for seven offices ...	...	1,821	21,852	...	21,852	
		Carried over ...	...	...	~~1,86,852~~ 1,87,932	...	1,86,072	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. ~~1,86,852~~ 1,87,932	Rs. ...	Rs. 1,86,072	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT —*cont.*						
		For two Third-class Divisions (a).						(a) 1. Vizagapatam division. 2. Salem division.
1	1	Clerk, 3rd Class, 3rd Grade.	50—60	55				
1	1	Do. 4th „ 2nd „	30—40	35				
2	2	Clerks, 4th „ 3rd „	20—30	50				
1	1	Draftsman, 2nd Class ...	35—50	42½				
1	1	Do. 3rd „ ...	20—30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
8	8	Total for each division ...	...	220½	...	...	...	
...	2			2	...	...	...	
	16	Total, Office Establishment, for two third-class divisions.	...	441	5,292	...	2,646	
		Office Establishment of the Consulting Architect to Government.						
1	1	Clerk, 1st Class, 3rd Grade.	200—250	225				
1	1	Do. 4th „ 1st „	40— 50	45				
1	1	Do. 4th „ 2nd „	30— 40	35				
2	2	Clerks, 4th „ 3rd „	20— 30	50				
1	1	Clerk, 5th „ 1st „	15— 20	17½				
1	1	Draftsman (Special)	~~80—100~~ 100—250	~~90~~ 115				
1	1	Do. 1st Class ...	50— 70	60				
1	1	Do. 2nd „ ...	35— 50	42½				
1	1	Do. 3rd „ ...	20— 30	25				
1	1	Messenger	7	7				
1	1	Do.	6	6				
12	12	Total, Office Establishment for Consulting Architect to Government.	...	~~603~~ 628	~~7,236~~ 7536	...	7,236	
		Carried over ...	...	...	~~1,99,380~~ 200780	...	1,95,954	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 1,99,380 2,00,760	Rs. ...	Rs. 1,95,954	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT —*cont.*						
		For Public Works Stores.						
1	1	Storekeeper	120—160	140				
1	1	Store Clerk, 3rd Class, 2nd Grade.	60— 80	70				
1	1	Do. 4th Class, 2nd Grade.	30— 40	35				
1	1	Do. 4th „ 3rd „	20— 30	25				
1	1	Messenger		8				
2	2	Messengers		7				
2	2	Do.		13				
9	9	Total, Office Establishment, Public Works Stores.	...	305	3,660	...	3,660	
		For Public Works Workshops, Presidency.						
1	1	Clerk, 3rd Class, 2nd Grade.	60—80	70				
1	1	Do. 3rd „ 3rd „	50—60	55				
1	1	Do. 4th „ 1st „	40—50	45				
1	1	Do. 4th „ 3rd „	20—30	25				
4	4	Clerks, 5th Class, 1st Grade.	15—20	70				
1	1	Clerk, 5th „ 2nd „	10—15	12½				
1	1	Draftsman, 1st Class ...	50—70	60				
4	4	Messengers	7	28				
14	14	Total, Office Establishment, Presidency Workshops.	...	365½	4,386	...	4,386	
		For Public Works Workshops, Dowlaishweram.						
1	1	Clerk, 3rd Class, 3rd Grade.	50—60	55				
1	1	Do. 4th „ 1st „	40—50	45				
2	2	Clerks, 4th „ 3rd „	20—30	50				
1	1	Clerk, 5th „ 1st „	15—20	17½				
1	1	Draftsman, 2nd Class ...	35—50	42½				
1	1	Duffadar	9	9				
5	5	Gate Peons	6	30				
1	1	Office Peon	6	6				
4	4	Store Peons	6	24				
16	16	Total, Office Establishment, Public Works Workshops, Dowlaishweram.	...	279 236½	3,348 2,838	...	2,838	
		Carried over ...	...	...	2,10,774 2,12,154 2,11,644	...	2,06,838	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 2,10,774 2,12,154 2,11,644	Rs. ...	Rs. 2,06,838	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT— *cont.*						
		For Nellore and Bezváda Workshops.						
...	1	Clerk	20	20				
...	1	Draftsman, 3rd class ...	20—30	25				
...	2	Total, Office Establishment, Nellore and Bezváda Workshops.	...	45	540		...	
		Office (Toll) Establishment, Buckingham Canal.						
1	1	Wharf Superintendent ...	50	50				
2	2	Clerks, 5th Class, 1st Grade.	15—20	35				
2	2	Toll-keepers		30				
4	4	Wharf Clerks	17½	70				
1	1	Clerk, 4th Class, 3rd Grade.	20—30	25				
1	1	Assistant Toll-keeper ...	10—15	12½				
1	1	Shroff		10				
1	1	Do.		8				
4	4	Lascars		28				
16	16	Do.	6	96				
33	33	Total, Office (Toll) Establishment, Buckingham Canal.	...	364½	4,374	...	4,374	
		For Seventy Sub-divisional Offices.						
1	1	Clerk, 4th Class, 3rd Grade.	20—30	25				
1	1	Messenger	6	6				
2	2	Total for each office ...	...	31				
70	70			70				
140	140	Total for seventy Sub-divisional Offices.	...	2,170	26,040	...	26,040	
		Carried over ...	...	...	2,41,728 2,42,068	...	2,37,252	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 2,41,728 2,42,568 2,42,058	Rs. ...	Rs. 2,37,252	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT—*cont.*						
		For Nilgiri Sub-division.						
1	1	Clerk, 4th Class, 2nd Grade.	30—40	35				
1	1	Messenger	9	9				
2	2	Total for Nilgiri Sub-division.	...	44	528	...	528	
		Add—						
1	1	Clerk, 4th Class, 3rd Grade, for Cumbum Sub-division, Kurnool division.	20—30	25				
3	3	Clerks, 5th Class, 1st Grade, for Eastern Sub-division, Central Delta Sub-division and Western Sub-division of Godávari Western division.	15—20	52½				
2	2	Clerks, 4th Class, 2nd Grade, for Koraput Sub-division of the Vizagapatam division.	30—40	70				
1	1	Messenger, Koraput Sub-division.	9	9				
3	3	Draftsmen, 3rd Class ...	20—30	75				
1	1	Clerk, 5th Class, 1st Grade.	15—20	17½				
11	11	Total for Sub-divisional offices.	...	249	2,988	...	2,988	
		For forty-nine Detached Officers.						
1	1	Clerk, 4th Class, 3rd Grade.	20—30	25				
53	49	For forty-nine detached officers.	...	49				
53	49	Total for forty-nine detached officers.	...	1,225	14,700	...	15,900	
		Carried over ...	...	...	2,59,944 2,60,784	...	2,56,668	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891–92.	Number. 1892–93.	Particulars.	Salary of Office.	Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Estimate for 1891–92.	Remarks.
		Brought forward ...	Rs. ...	Rs. ...	Rs. 2,59,944 2,60,784 2,60,274	Rs. ...	Rs. 2,56,668	
		EXECUTIVE BRANCH —*cont.*						
		OFFICE ESTABLISHMENT —*cont.*						
		For eighty-nine Overseers.						
1	1	Clerk, 5th Class, 1st Grade.	15—20	17½				
88	89		...	89				
88	89	Total for eighty-nine Overseers.	...	1,557½	18,690	...	18,480	
		Total, Office Establishment.	...	...	2,78,634 2,78,964	...	2,75,148	
		Temporary Establishment.	...	...	1,72,380	...	1,72,380	
		Local Allowances.						
		Upper Godávari allowances.	...	180				
		Wynaad allowances ...	...	2,000				
		Potinghy Ghât allowances.	...	3,000				
		Presidency allowances ...	...	8,020				
		Do. house-rent ...	...	6,660				
		Periyár allowance ...	...	9,066				
		Total, Local Allowances ...	...	...	28,926	...	23,360	
		SALARIES.						
		Abstract of the above.						
		Engineer Establishment ...	...	...	6,67,722	...	6,68,389	
		Upper Subordinate Establishment.	...	...	3,46,788	...	3,45,556	
		Lower Subordinate Establishment.	...	...	16,260 2,02,626 2,05,806	...	17,040 2,00,436	
		Petty Establishment ...	...	...	2,78,634 2,78,964	...	2,75,148	
		Office do. ...	...	...	1,72,380	...	1,72,380	
		Temporary do. ...	...	...	28,926	...	23,360	
		Local allowances	...	...				
		Total, Salaries ...	...	...	17,16,516 17,13,666	...	17,02,309	
		Travelling allowances ...	...	...	2,00,000	...	1,90,000	
		Contingencies for Chief Engineer, Public Works Department, Chief Engineer for Irrigation, Superintending Engineers' offices and Divisional offices.	...	...	45,000	...	45,456	
		Total for Executive Branch.	...	...	19,61,516 19,58,666	...	19,37,765	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		ACCOUNTS BRANCH.						
1	1	Examiner, 2nd Class and Major, R.E.	1,532	1,532				
2	2	Deputy Examiners, 2nd Grade.	450	900				
...	1	Assistant Examiner, 1st Grade.	350	350				
3	4	Total, Examiners ...	...	2,782	33,384	...	29,184	
		Accountants.						
2	2	Accountants, 1st Grade ..	350—450	800				
3	3	Do. 2nd „ ...	250—340	885				
6	6	Do. 3rd „ ...	160—240	1,200				
17	28	Do. 4th „ ...	80—150	3,220				
28	13	Do. 5th „ ...	40— 75	747½				
56	52	Total, Accountants ...	...	6,852½	82,230	...	77,400	
		Office Establishment.						
...	1	Clerk, 2nd Class, 1st Grade	200	200				
1	...	Do. 2nd „ 2nd „	120—160	...				
1	2	Clerks, 3rd „ 1st „	90	180				
3	2	Do. 3rd „ 2nd „	70	140				
7	7	Do. 3rd „ 3rd „	55	385				
6	11	Do. 4th „ 1st „	45	495				
10	16	Do. 4th „ 2nd „	35	560				
18	23	Do. 4th „ 3rd „	25	575				
16	...	Do. 5th „ 1st „	15— 20	...				
...	13	Do. 5th „ 1st „	20	260				
62	75	Total ...	...	2,795	...	...	...	
		Menial Servants.						
1	...	Attender	12	...				
...	1	Do.	15	15				
1	...	Do.	10	...				
...	1	Do.	12½	12½				
1	1	Muchi	12	12				
1	1	Do.	10	10				
1	1	Do.	8	8				
1	1	Head Messenger	10	10				
...	1	Do.	9	9				
		Carried over ...	...	76½	1,15,614	...	1,06,584	

GOVERNMENT OF MADRAS.

PART III—concluded.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—concluded.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	76½	1,15,614	...	1,06,584	
		ACCOUNTS BRANCH —*cont.*						
		Menial Servants—cont.						
1	2	Messengers	8	16				
4	8	Messenger	7	56				
6	1	Do.	6	6				
2	...	Rollers	6	...				
19	*18	Total, Menial Servants ...	...	154½				* Excludes 3 lascars provided for under Petty Establishment for the office of Examiner, Public Works Accounts.
		Total, Office Establishment.	...	2,949½	35,394	...	27,852	
		Local and Charge Allowances.						
		Presidency house-rent ...	...	275				
		Do. allowance ...	...	620				
		Charge allowance for 6 Accountants, 5th Grade.	20	120				
		Total, Local and Charge Allowances.	...	1,015	12,180	...	13,440	
		Total, Salaries	...	...	1,63,188		1,47,876	
		Travelling allowances ...	...	...	4,000		4,000	
		Contingencies	...	...	3,500		3,500	
		Grand Total ...	...	...	...	1,70,688	1,55,376	
		Deduct— Contribution as follows :— Coorg, 1 Accountant, 3rd Grade. Contribution on account of audit of Coorg.	...	...	...	† — 4,880	— 5,420	† Rs. 2,000 for audit. „ 2,880 pay of the Divisional Accountant at Rs. 240. Total Rs. 4,880
		Net Total ...	...	...	...	1,65,808	1,49,956	
		Abstract.				1,58,666		
		Executive Branch	...	...	...	19,61,516	19,37,765	
		Accounts do.	...	...	...	1,65,808	1,49,956	
		Grand Total, Public Works Department Establishment.	...	...	...	21,27,324 / 21,24,474	20,87,721	

GOVERNMENT OF MADRAS.

PART III—continued.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—continued.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		ACCOUNTS BRANCH.						
1	1	Examiner, 2nd Class and Major, R.E.	1,532	1,532				
2	2	Deputy Examiners, 2nd Grade.	450	900				
...	1	Assistant Examiner, 1st Grade.	350	350				
3	4	Total, Examiners ...	...	2,782	33,384	...	29,184	
		Accountants.						
2	2	Accountants, 1st Grade ..	350—450	800				
3	3	Do. 2nd „ ...	250—340	885				
6	6	Do. 3rd „ ...	160—240	1,200				
17	28	Do. 4th „ ...	80—150	3,220				
28	13	Do. 5th „ ...	40— 75	747½				
56	52	Total, Accountants ...	...	6,852½	82,230	...	77,400	
		Office Establishment.						
...	1	Clerk, 2nd Class, 1st Grade	200	200				
1	...	Do. 2nd „ 2nd „	120—160	...				
1	2	Clerks, 3rd „ 1st „	90	180				
3	2	Do. 3rd „ 2nd „	70	140				
7	7	Do. 3rd „ 3rd „	55	385				
6	11	Do. 4th „ 1st „	45	495				
10	16	Do. 4th „ 2nd „	35	560				
18	23	Do. 4th „ 3rd „	25	575				
16	...	Do. 5th „ 1st „	15— 20	...				
...	13	Do. 5th „ 1st „	20	260				
62	75	Total ...	...	2,795	...	...	...	
		Menial Servants.						
1	...	Attender	12	...				
...	1	Do.	15	15				
1	...	Do.	10	...				
...	1	Do.	12½	12½				
1	1	Muchi	12	12				
1	1	Do.	10	10				
1	1	Do.	8	8				
1	1	Head Messenger	10	10				
...	1	Do.	9	9				
		Carried over ...	...	76½	1,15,614	...	1,06,584	

GOVERNMENT OF MADRAS.

PART III—concluded.

DETAIL OF THE BUDGET-ESTIMATE FOR ESTABLISHMENT, &c.—concluded.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Estimate for 1892-93. Per Mensem.	Per Annum.	Total.	Estimate for 1891-92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Brought forward ...	...	76½	1,15,614	...	1,06,584	
		ACCOUNTS BRANCH —*cont.*						
		Menial Servants—cont.						
1	2	Messengers	8	16				
4	8	Messenger	7	56				
6	1	Do.	6	6				
2	...	Rollers	6	...				
19	*18	Total, Menial Servants ...	...	154½				* Excludes 3 lascars provided for under Petty Establishment for the office of Examiner, Public Works Accounts.
		Total, Office Establishment.	...	2,949½	35,394	...	27,852	
		Local and Charge Allowances.						
		Presidency house-rent ...	...	275				
		Do. allowance ...	...	620				
		Charge allowance for 6 Accountants, 5th Grade.	20	*120				
		Total, Local and Charge Allowances.	...	1,015	12,180	...	13,440	
		Total, Salaries	...	...	1,63,188		1,47,876	
		Travelling allowances ...	...	...	4,000		4,000	
		Contingencies	...	...	3,500		3,500	
		Grand Total ...	...	...	...	1,70,688	1,55,376	
		Deduct— Contribution as follows :— Coorg, 1 Accountant, 3rd Grade. Contribution on account of audit of Coorg.	...	...	...	† — 4,880	— 5,420	† Rs. 2,000 for audit. „ 2,880 pay of the Divisional Accountant at Rs. 240. Total Rs. 4,880
		Net Total ...	...	...	...	1,65,808	1,49,956	
		Abstract.				1,95,688		
		Executive Branch	...	...	...	19,61,516	19,37,765	
		Accounts do.	...	...	...	1,65,808	1,49,956	
		Grand Total, Public Works Department Establishment.	...	...	...	21,27,324 / 21,24,474	20,87,721	

GOVERNMENT OF MADRAS.

PART III—concluded.

ABSTRACT OF THE FOREGOING PROVISION FOR ESTABLISHMENT.

Number. 1891-92.	Number. 1892-93.	Particulars.	Salary of Office.	Budget Estimate for 1892–93. Per Mensem.	Per Annum.	Total.	Budget Estimate, 1891–92.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	
		Total, Public Works Establishment.	...	...	...	21,27,324 2,24,474	20,87,721	
		Deduct Contributions—						
		Works in Estates under the Court of Wards.	...	...	7,268			
		Imperial Military Works.	...	...	16,700			
		Imperial Civil Works ...	...	...	~~4,250~~ 5820			
		Incorporated Local Fund Works.	...	...	~~8,075~~ 8,000			
		35. Protective Irrigation Works.	...	...	83,398			
		42. Major Irrigation Works (Working Expenses.)	...	...	~~4,59,050~~ 457779			
		49. Capital Expenditure on Major Irrigation Works.	...	...	~~2,26,948~~ 229,672			
		43. Minor Irrigation Works and Navigation.	...	...	7,10,170	~~15,15,859~~ 15,19,186	15,97,721	
		Balance debitable to Provincial Civil Works.	...	...	...	~~6,11,465~~ 605,288	4,90,000	

GOVERNMENT OF MADRAS.

PART IV.

DETAIL OF THE BUDGET-ESTIMATE FOR TOOLS AND PLANT UNDER CIVIL WORKS IN MADRAS FOR THE YEAR 1892–93.

Divisions.	Surveying and Mathematical Instruments.	Machinery.	Tools.	Plant.	Office Furniture.	Camp Equipage.	Live Stock.	Repairs and Carriage.	Total Budget estimate, 1892-93.	Budget Estimate, 1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjam	...	...	...	...	...	...	...	...	500	
Vizagapatam	...	...	...	...	...	...	...	...	1,000	
Godávari, Eastern	...	...	...	...	...	...	...	...	1,500	
Kistna, Eastern	...	...	...	...	...	...	...	...	500	
Do. Western	...	...	...	...	...	...	...	...	100	
Nellore	...	...	...	...	...	...	...	...	2,000	
Bellary	...	...	...	...	...	...	...	...	1,000	
Cuddapah	...	...	...	...	...	...	...	...	1,000	
Kurnool	...	...	...	...	...	...	...	...	1,000	
North Arcot	...	...	...	...	...	...	...	...	~~2,500~~ 4,000	
Coimbatore	...	...	...	...	...	...	...	...	1,500	
West Coast	...	...	...	...	...	...	...	...	600	
South Arcot	...	...	...	...	...	...	...	...	500	
Chingleput	...	...	...	...	...	...	...	...	150	
Negapatam	...	...	...	...	...	...	...	...	600	
Tanjore	...	...	...	...	...	...	...	...	2,500	
Public Works Workshops ...	...	...	...	...	...	...	...	...	10,200	
Do. Stores	...	...	...	...	...	...	...	...	400	
Madura	...	...	...	...	...	...	...	...	300	
Tinnevelly	...	...	...	...	...	...	...	...	400	
Trichinopoly	...	...	...	...	...	...	...	...	1,200	
Architect										
Total ...	...	...	...	...	...	...	...	...	30,450	28,066
London Supplies	...	...	...	...	...		...	...	~~70,619~~ 70,769	98,603
Grand Total ...	...	...	...	...	...	...	...	...	1,01,069 101,219	1,26,669

ABSTRACT OF THE FOREGOING PROVISION FOR TOOLS AND PLANT.

	Budget Estimate, 1892–93.	Budget Estimate, 1891–92.
	Rs.	Rs.
Total of the details shown above	~~1,01,069~~	1,26,669
Deduct Contributions—		
Imperial Military Works	1,100	
Imperial Civil Works	250	
Incorporated Local Fund Works	~~55~~	
Included Local Fund Works 43. Provincial Minor Works and Navigation	19,664	
	~~21,069~~	26,669
Balance debitable to Provincial Civil Works ...	80,000	1,00,000

PROVINCIAL
CIVIL WORKS.

DRAS.

DISTRIBUTION OF OBJECTS OF WORKS.

—	Works in Progress.	Works.	Repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
CIVIL BUILDINGS.				
6. Administration	~~1,97,442~~	2,64,139	61,190	
7. Minor Departments	...	2,761	1,243	
8. Law and Justice	2,11,661	3,51,923	7,105	
9. Ecclesiastical	...	12,218	21,408	
10. Jails	~~585~~	19,335	13,357	
11. Police	6,575	43,167	9,211	
12. Educational	~~1,52,560~~	64,770	9,230	
13. Medical	~~1,65,680~~	52,575	19,323	
14. Forest	...	2,171	...	
15. Customs	...	13,115	1,117	
16. Miscellaneous	~~26,140~~	98,892	38,422	
Minor works	...	...	...	
Reserve for incomplete works ...	~~1,67,931~~	...	...	
Total, Civil Buildings ...	~~9,28,574~~	9,24,866	1,81,606	0,48,454
COMMUNICATIONS.				
1. Metalled roads raised and bridged.	1,97,879	4,30,596	1,34,541	
5. Boat bridges and ferries	...	...	...	
Navigable canals	...	...	...	
River improvements	...	...	...	
Minor works	...	...	...	
Total, Communications ...	1,97,879	4,30,596	1,34,541	3,80,215
MISCELLANEOUS PUBLIC IMPROVEMENTS.				
1. Town buildings	...	1,792	9,702	
3. Pavings and streets	...	...	...	
5. Water-supply	...	5,751	30	
6. Sewerage including drainage ...	...	...	978	
7. Harbour and navigation ...	...	8,360	1,630	
8. Light-houses	...	...	...	
9. Mines	...	...	...	
11. Miscellaneous	...	1,997	...	
Minor works	...	...	...	
Total, Miscellaneous Public Improvements	...	17,900	12,340	76,887
Total, Works ...	~~11,26,453~~	3,73,362	3,28,487	5,05,556
Establishment	...	...	...	6,39,617
Tools and Plant	...	...	...	57,095
Suspense	...	...	...	**25,103**
Profit and Loss	...	...	...	298
Grand Total ...	...	...	...	0,77,463

MADRAS.

X D.

CH, PUBLIC WORKS DEPARTMENT, FOR THE YEARS 1891-92 AND 1892-93.

Accounts.	Budget Estimate for 1892-93.	Revised Estimate for 1891-92.
4	5	6
	Rs.	Rs.
Civil Department	15,63,575	7,35,945
Central Adjusting Account	4,800	4,300
Telegraph Department	500	800
Transfers of the Public Works Department—		
Divisional	9,97,000	6,10,000
General	23,000	66,300
Irrigation	61,27,000	71,73,248
State Railways	48,000	26,000
State Outlay on Guaranteed Railways	1,20,000	1,20,000
Subsidized Companies	*31,545	*8,651
Guaranteed Railways	3,600	...
London Account—		
Miscellaneous	...	...
(Applicable only when used for Estimates of Buildings and Roads Branch.)		
Expenditure against Imperial Budget Grant—		
Military Works	90,000	92,092
Civil Works	23,000	55,006
Special Defence Works	...	...
Expenditure against Provincial Budget Grant	23,00,000	32,85,960
Expenditure against Incorporated Local Fund Budget Grant	29,120	1,42,098
Generally applicable.		
Suspense Accounts (not affecting the Budget Grant)—		
Deposits	2,74,000	2,18,000
Tuccavee Advances	...	...
Expenditure against Contributions by Native States	...	...
Famine Relief	75,400	1,28,500
Civil Engineers' Provident Fund	...	...
Total ...	1,17,10,540	1,26,66,000
Balance—		
Cash in chest (including imprests)	37,000	37,000
Cash in hands of Civil officers	...	...
Grand Total ...	1,17,47,540	1,27,03,000

vernment on account of the Nilgiri Railway.

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

AP

DISTRIBUTION OF PROVISION

Circles and divisions.	Chief Engineers.		Superintending Engineers.		Examiners.		Deputy and Assistant Examiners.		Under Secretaries.		Executive Engineers.		Assist Engin	
	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	C
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		
Chief Engineer and Secretary	2	45,360	..	..	..	..	..	..	2	17,640	..	..	..	
Consulting Architect	..	..	1	13,608	..	..	..	..	..	..	..	..	1	
Examiner of Public Works Accounts	..	..	..	..	1	18,384	3	15,000	..	..	..	..	..	
Total	2	45,360	1	13,608	1	18,384	3	15,000	2	17,640	..	..	1	
I Circle.														
Superintending Engineer	..	..	1	11,088	..	..	..	..	..	..	..	..	..	
Ganjam division	..	..	..	..	..	..	..	..	..	..	1	7,056	1	
Vizagapatam division	..	..	..	..	..	..	..	..	..	..	1	8,064	2	1
Godávari Eastern division	..	..	..	..	..	..	..	..	..	..	1	9,576	2	
Do. Western do.	..	..	..	..	..	..	..	..	..	..	1	7,176	2	
Bushikulya do.	..	..	..	..	..	..	..	..	..	..	2	14,120	1	
Total	..	..	1	11,088	..	..	..	..	..	..	6	45,992	8	4
II Circle.														
Superintending Engineer	..	..	1	13,608	..	..	..	..	..	..	..	..	..	
Kistna Eastern division	..	..	..	..	..	..	..	..	..	..	1	8,064	2	
Do. Western do.	..	..	..	..	..	..	..	..	..	..	2	14,112	2	
Gudiváda do.	..	..	..	..	..	..	..	..	..	..	1	7,056	1	
Nellore do.	..	..	..	..	..	..	..	..	..	..	2	13,104	2	1
Buckingham Canal division	..	..	..	..	..	..	..	..	..	..	1	8,064	1	
Total	..	..	1	13,608	..	..	..	..	..	..	7	50,400	8	3
III Circle.														
Superintending Engineer	..	..	1	11,088	..	..	..	..	..	..	..	..	..	
Bellary division	..	..	..	..	..	..	..	..	..	..	1	9,576	1	
Cuddapah do.	..	..	..	..	..	..	..	..	..	..	1	7,056	1	
Kurnool do.	..	..	..	..	..	..	..	..	..	..	1	8,064	1	
Total	..	..	1	11,088	..	..	..	..	..	..	3	24,696	3	1
IV Circle.														
Superintending Engineer	..	..	1	16,128	..	..	..	..	..	..	..	..	..	
Coimbatore division	..	..	..	..	..	..	..	..	..	..	2	15,624	1	
West Coast do.	..	..	..	..	..	..	..	..	..	..	1	9,072	1	
North Arcot do.	..	..	..	..	..	..	..	..	..	..	2	17,640	1	
Salem do.	..	..	..	..	..	..	..	..	..	..	1	7,056	1	
Total	..	..	1	16,128	..	..	..	..	..	..	6	49,392	4	2
V Circle.														
Superintending Engineer	..	..	1	16,128	..	..	..	..	..	..	..	..	..	
Chingleput division	..	..	..	..	..	..	..	..	..	..	1	8,064	1	
South Arcot do.	..	..	..	..	..	..	..	..	..	..	1	8,064	1	
Public Works Stores division	..	..	..	..	..	..	..	..	..	..	..	..	1	
Public Works Workshops division	..	..	..	..	..	..	..	..	..	..	..	..		
Tanjore division	..	..	..	..	..	..	..	..	..	..	2	15,624	1	
Negapatam division	..	..	..	..	..	..	..	..	..	..	1	7,056	1	
Total	..	..	1	16,128	..	..	..	..	..	..	5	38,808	5	2
VI Circle.														
Superintending Engineer	..	..	1	13,608	..	..	..	..	..	..	..	..	..	
Trichinopoly division	..	..	..	..	..	..	..	..	..	..	1	10,176	1	
Madura do.	..	..	..	..	..	..	..	..	..	..	2	15,120	1	
Tinnevelly do.	..	..	..	..	..	..	..	..	..	..	1	9,576	1	
No. II Periyár do.	..	..	..	..	..	..	..	..	..	..	1	8,064	3	1
Total	..	..	1	13,608	..	..	..	..	..	..	5	42,936	6	3
No. I Periyár division	..	..	..	..	..	..	..	..	..	..	3	27,240	2	1
Total	..	..	..	..	..	..	..	..	..	..	3	27,240	2	1

MADRAS.

DIX C.

ESTABLISHMENT FOR 1892-93.

Upper Subordinates.		Lower Subordinates.		Accountants.		Office Establishment.		Establish-	Establish-	Temporary Establishment.						
No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	Petty ment.	Medical nent.	Engineer.	Upper Subordinate.	Lower Subordinate.	Office.	Petty.	Accountant.	Total.
	Rs.		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	..	..	81	59,640	504	..	..	..	..	..	..	..	..
6	19,668	2	1,380	1	1,380	23	9,534	1,608	..	..	..	..	..	..	..	..
..	..	..	..	15	35,620	93	35,394	216	..	..	..	..	..	..	..	..
6	19,668	2	1,380	16	37,000	197	1,04,568	2,328	..	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,682	288	..	..	..	..	..	..	..	..
5	7,392	1	300	2	2,070	21	5,484	1,401	..	..	..	..	..	..	..	..
7	13,044	2	1,020	1	930	28	8,336	2,409	..	..	..	..	..	..	..	..
8	11,604	..	..	2	2,070	43	10,912	3,489	792	..	..	..	..	..	..	..
7	12,780	2	720	2	2,070	31	9,114	1,881	612	..	..	..	..	..	..	..
6	9,132	1	600	2	2,070	19	5,400	1,473	..	..	..	..	..	..	..	..
33	53,952	6	2,640	9	9,210	156	47,928	10,941	1,404	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,682	288	..	..	..	..	..	..	..	..
3	5,796	1	600	2	2,070	19	5,940	3,825	..	..	..	..	..	..	..	..
7	7,092	..	..	1	1,380	20	5,880	1,737	660	..	..	..	..	..	..	..
2	3,744	..	..	1	930	8	1,764	1,005	..	..	..	..	..	..	..	..
8	12,852	2	840	1	1,380	22	6,282	3,493	..	..	..	..	..	..	..	..
5	9,720	2	1,200	1	1,380	53	10,524	1,509	..	..	..	..	..	..	..	..
25	39,204	5	2,640	6	7,140	136	39,072	11,857	660	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,322	288	..	..	..	..	..	..	..	..
8	16,416	2	1,200	1	1,380	21	5,982	2,253	..	..	..	..	..	..	..	..
8	13,344	2	720	1	930	19	5,430	1,221	..	..	..	..	..	..	..	..
8	15,852	1	600	1	1,380	26	7,938	2,661	..	..	..	..	..	..	..	..
24	45,612	5	2,520	3	3,690	80	27,672	6,423	..	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,322	288	..	..	..	..	..	..	..	..
6	12,492	2	1,020	1	1,380	23	6,522	1,893	..	..	..	..	..	..	..	..
4	12,408	3	1,500	2	2,070	17	5,552	1,149	..	..	..	..	..	..	..	..
8	11,436	1	420	1	1,380	20	5,730	1,507	..	..	..	..	..	..	..	..
6	14,592	..	..	1	1,380	17	4,620	1,221	..	..	..	..	..	..	..	..
24	50,928	6	2,940	5	6,210	91	30,746	6,058	..	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,322	288	..	..	..	..	..	..	..	..
15	26,784	1	600	1	1,380	27	7,032	1,941	..	..	..	..	..	..	..	..
8	15,060	1	420	1	1,380	21	6,132	1,725	..	..	..	..	..	..	..	..
1	3,384	1	600	1	1,380	9	3,660	864	..	..	..	..	..	..	..	..
7	9,912	1	300	1	930	14	4,386	2,016	..	..	..	..	..	..	..	..
4	7,236	..	..	1	1,380	19	5,760	1,581	..	..	..	..	..	..	..	..
					930	15	4,500	1,075	..	..	..	..	..	..	..	..
35	62,376	4	1,920	6	7,380	119	39,792	9,490	..	..	..	..	..	..	..	..
..	..	..	..	..	..	14	8,322	288	..	..	..	..	..	..	..	..
6	9,600	2	720	1	930	16	4,938	1,221	..	..	..	..	..	..	..	..
8	14,364	2	900	1	1,380	20	5,592	1,581	..	..	..	..	..	..	..	..
8	12,756	1	600	1	1,380	20	5,970	1,581	..	..	..	..	..	..	..	..
5	12,408	..	..	1	1,380	..	..	..	..	..	..	..	..	..	..	..
27	49,128	5	2,220	4	5,070	70	24,822	4,671	..	..	..	..	..	..	..	..
6	15,012	..	..	2	3,330	..	..	..	2,646	..	..	..	..	..	..	..
6	15,012	..	..	2	3,330	..	..	..	2,646	..	..	..	..	..	..	..

APPENDIX C.

DISTRIBUTION OF PROVISION FOR ESTABLISHMENT FOR 1892-93—*cont.*

Circles and divisions.	Revenue Establishment.				Land Measurement.			Navigation and water regulation establishment.	Extra measuring establishment.	Steamer establishment.	Presidency allowance and house-rent.	Total salaries.	Travelling allowance.
	Deputy Revenue Superintendents and Deputy Collectors.	Zilladars or Tahsildars.	Other establishment.	Total.	Ameens.	Other establishment.	Total.						
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Chief Engineer and Secretary ..	..	..	..	..	..	..	..	..	..	..	3,000	1,26,144	5,290
Consulting Architect	..	..	..	..	..	..	..	..	..	..	5,700	57,918	2,615
Examiner of Public Works Accounts	..	..	..	..	..	..	..	..	..	..	10,740	1,15,354	4,000
Total ..	..	..	..	..	..	..	..	..	..	..	19,440	2,99,416	11,905
I Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	..	20,058	1,653
Ganjam division	..	..	..	..	..	..	..	930	..	..	..	29,673	6,325
Vizagapatam division ..	..	..	..	..	..	..	..	1,212	..	..	..	47,087	6,851
Godávari Eastern division ..	..	..	..	..	..	..	..	21,066	..	..	..	69,409	5,745
Do. Western do. ..	..	..	..	..	..	..	..	31,212	..	..	..	73,521	8,224
Rushikulya division	..	..	..	..	..	..	..	..	..	..	..	37,835	5,404
Total ..	..	..	..	..	..	..	..	54,420	..	..	..	2,77,583	34,202
II Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	..	22,578	1,694
Kistna Eastern division ..	..	..	..	..	..	..	..	14,964	..	..	..	49,827	4,127
Do. Western do. ..	..	..	..	..	..	..	..	10,716	..	..	..	46,617	5,215
Gudiváda division	..	..	..	..	..	..	..	5,664	..	..	..	25,203	1,580
Nellore do.	..	..	..	..	..	..	..	8,640	..	..	..	56,671	8,685
Buckingham Canal division ..	..	..	..	..	..	..	..	..	..	..	3,220	38,137	6,166
Total ..	..	..	..	..	..	..	..	39,984	..	..	3,220	2,39,033	27,467
III Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	..	19,698	1,415
Bellary division	..	..	..	..	..	..	..	..	..	..	..	41,847	7,658
Cuddapah do.	..	..	..	..	..	..	..	..	..	..	..	33,741	6,890
Kurnool do.	..	..	..	..	..	..	..	8,040	..	..	..	49,575	9,528
Total ..	..	..	..	..	..	..	..	8,040	..	..	..	1,44,861	25,491
IV Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	..	24,738	3,107
Coimbatore division	..	..	..	..	..	..	..	180	..	..	..	44,151	5,897
West Coast do.	..	..	..	..	..	..	..	222	..	..	..	38,325	9,190
North Arcot do.	..	..	..	..	..	..	..	6,504	..	..	..	49,657	10,542
Salem do.	..	..	..	..	..	..	..	924	..	..	..	34,833	5,000
Total ..	..	..	..	..	..	..	..	7,830	..	..	..	1,91,704	33,736
V Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	720	25,458	1,523
Chingleput division	..	..	..	..	..	..	..	3,132	..	..	..	53,973	10,941
South Arcot do.	..	..	..	..	..	..	..	8,208	..	..	..	46,029	7,303
Public Works Stores division ..	..	..	..	..	..	..	..	..	..	..	2,040	24,300	360
Public Works Workshops division	..	..	..	..	..	..	..	..	..	..			497
Tanjore division	..	..	..	..	..	..	..	15,504	..	..	..	53,589	5,986
Negapatam do.	..	..	..	..	..	..	..	2,532	..	..	..	28,369	4,547
Total ..	..	..	..	..	..	..	..	29,376	..	..	2,760	2,31,718	31,157
VI Circle.													
Superintending Engineer ..	..	..	..	..	..	..	..	..	..	..	..	22,218	1,925
Trichinopoly division ..	..	..	..	..	..	..	..	3,324	..	..	..	35,949	4,082
Madura do. ..	..	..	..	..	..	..	..	192	..	..	..	44,169	7,519
Tinnevelly do. ..	..	..	..	..	..	..	..	6,588	..	..	..	43,491	5,471
No. II Periyár do. ..	..	..	..	..	..	..	..	..	..	..	..	36,972	6,490
Total ..	..	..	..	..	..	..	..	10,104	..	..	..	1,82,799	25,487
No. I Periyár division ..	..	..	..	..	..	..	..	..	..	..	..	63,108	8,954
Total ..	..	..	..	..	..	..	..	..	..	..	..	63,108	8,954

Contingencies and postage.	Grand Total establishment.	Grant for Works and Repairs.									Estimated Receipts.	
		Imperial.			Provincial.		Contributions.	Incorporated Local Fund.	Excluded Local.		Total.	Military Works and Civil Works.	Productive Public Works Minor Irrigation Minor Works and Navigation.
		Military Works.	Civil Works.	Productive Public Works.	Civil Works.	Minor Works and Navigation.			University Fee Fund.	Port Fund.			
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	..	..	..	..	..	..
6,446	1,37,880	..	..	..	..	..	..	..	..	..	..	..	..
1,012	61,545	..	3,500	..	6,10,058	..	..	..	..	..	6,13,558	..	..
3,500	1,22,854	..	..	..	..	..	..	..	..	..	..	..	..
10,958	3,22,279	..	3,500	..	6,10,058	..	..	..	..	..	6,13,558	..	..
902	22,613	..	..	..	..	..	..	..	..	..	..	..	..
1,010	37,008	500	..	..	95,283	23,000	..	..	..	..	1,18,783	..	..
1,305	55,243	2,500	1,000	..	24,836	39,117	..	..	..	..	67,453	..	..
1,168	76,322	840	1,800	87,000	7,300	58,000	..	3,060	..	..	1,58,000	..	..
606	82,351	..	..	1,75,309	18,000	47,500	..	1,050	..	..	2,41,859	..	..
1,280	44,519	..	..	* 3,62,602	..	1,000	..	400	..	..	3,64,002	..	..
6,271	3,18,056	3,840	2,800	6,24,911	1,45,419	1,68,617	..	4,510	..	..	9,50,097	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
1,166	25,438	..	500	1,33,270	21,500	41,950	..	1,280	..	..	2,48,500	..	..
1,096	55,050	..	200	2,42,812	13,000	22,345	..	1,325	..	..	2,79,682	..	..
680	52,512	..	..	1,24,000	..	..	..	..	..	..	1,24,000	..	..
365	27,148	..	..	1,95,494	13,800	1,03,953	..	..	..	..	2,23,247	..	..
1,156	66,512	..	..	..	..	2,40,800	..	..	..	..	2,40,800	..	..
891	45,194	..	..	..	..	..	..	..	..	..	..	..	..
5,354	2,71,854	..	700	6,55,576	48,300	4,09,048	..	2,605	..	..	11,16,229	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
471	21,584	..	..	..	..	..	..	..	..	..	..	..	..
844	50,349	..	4,100	..	51,995	86,000	..	..	..	..	1,42,095	..	..
834	41,465	180	200	..	21,487	62,900	..	..	..	..	84,767	..	..
1,754	60,857	..	200	90,000	20,415	32,580	..	..	..	..	1,43,195	..	..
3,903	1,74,255	180	4,500	90,000	93,897	1,81,480	..	..	..	..	3,70,057	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
1,245	29,090	..	..	..	..	..	..	..	..	..	..	..	..
1,140	51,188	6,000	1,200	..	1,09,190	33,200	..	..	..	..	1,49,590	..	..
2,057	49,572	53,200	600	..	2,32,500	2,000	..	..	..	..	2,88,300	..	..
2,929	63,128	..	500	..	30,330	2,47,500	..	..	..	..	2,78,330	..	..
1,128	40,961	..	800	4,390	10,000	51,300	..	..	..	..	66,490	..	..
8,499	2,33,939	59,200	3,100	4,390	3,82,020	3,34,000	..	..	..	..	7,82,710	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
443	27,424	..	..	..	..	..	..	..	..	..	..	..	..
1,125	66,039	..	..	..	22,000	1,99,947	..	..	..	..	2,21,947	..	..
1,049	54,381	180	80	..	34,720	1,88,230	..	3,390	..	..	2,26,600	..	..
253	25,691	..	..	..	950	..	..	..	..	..	950	..	..
281		..	..	..	2,500	..	..	..	..	..	2,500	..	..
953	60,528	360	300	77,380	10,565	92,023	..	5,695	..	..	1,86,323	..	..
313	33,229	..	120	49,630	6,970	45,000	..	3,540	..	..	1,05,260	..	..
4,417	2,67,292	540	500	1,27,010	77,705	5,25,200	..	12,625	..	..	7,43,580	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..
527	24,670	..	..	..	..	..	..	..	..	..	..	..	..
322	40,353	5,000	400	18,140	16,085	81,970	..	1,000	..	..	1,22,595	..	..
1,100	52,788	180	400	..	45,990	65,540	..	..	..	..	1,12,110	..	..
922	49,884	540	800	14,195	11,900	81,000	..	..	..	..	1,08,435	..	..
478	43,940	..	..	2,93,000	..	..	..	..	..	..	2,93,000	..	..
3,349	2,11,635	5,720	1,600	3,25,335	73,975	2,28,510	..	1,000	..	..	6,36,140	..	..
3,268	75,330	..	..	3,66,000	..	..	..	..	..	..	3,66,000	..	..
3,268	75,330	..	..	3,66,000	..	..	..	..	..	..	3,66,000	..	..

* This represents grant under 35. Construction of Protective Irrigation Works.

APPENDIX C.

DISTRIBUTION OF PROVISION FOR ESTABLISHMENT FOR 1892-93—*cont.*

Circles and divisions.	Chief Engineers.		Superintending Engineers.		Examiners.		Deputy and Assistant Examiners.		Under Secretaries.		Executive Engineers.		Assistant Engineers.		Upper Subordinates.		Lower Subordinates.		Accountants.		Office Establishment.		Establishment.		Establishment.		Temporary Establishment.						
	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	Petty ment.		Medical ment.		Engineer.	Upper Subordinate.	Lower Subordinate.	Office.	Petty.	Accountant.	Total.
Tank Restoration Scheme.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Head quarter office Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. I Party Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	1	7,056	..	..	1	672	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. II Party Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. IV Party Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	1	9,576	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. V Party Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. VII Party Kistna Western division	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
No. VIII Party Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Special Tank Restoration Scheme, Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Investigation Party Kistna district	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Examiner's division	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	2	16,632	..	..	1	672	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Reserve with Government	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Do. with Military Works Department	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Grand Total ..	2	45,360	7	95,256	1	18,384	3	15,000	2	17,640	37	2,96,096	37	1,81,196	181	3,36,552	33	16,260	51	79,030	849	3,14,600	51,768		4,710		..	..	..	..	..	..	..
Military pay and allowances	..	2,922	..	8,256	..	..	..	..	..	..	..	26,496	..	2,280	..	12,684	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Maintenance allowance of the students of the College of Engineering during practical year of training	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,280	..	..	..	..	..	..	..		..		..	..	..	..	..	..	1,72,380
Temporary establishment	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Minor works, Revenue Department	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Old maintenance charges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..		..	..	..	..	..	..	..
Grand Total ..	2	48,282	7	1,03,512	1	18,384	3	15,000	*2	17,640	†37	‡3,22,592	37	‡1,83,976	181	‡3,51,516	33	16,260	51	‡79,030	849	‡3,14,600	51,768		‡4,710		..	..	..	..	..	..	1,72,380

* To be included under Executive Engineers. † Includes a foreign officer. ‡ Includes local and charge allowances with the exception of Presidency allowances and house-rent.

& This sum has not been distributed among Circles and Divisions as the establishment required for each office has not yet been sanctioned

PROVINCIAL SERVICES.
PUBLIC WORKS BUDGET-ESTIMATE.

MADRAS.

APPENDIX C.

DISTRIBUTION OF PROVISION FOR ESTABLISHMENT FOR 1892-93—*cont.*

Circles and divisions.	Revenue Establishment.				Land Measurement.			Navigation and water regulation establishment.	Extra measuring establishment.	Steamer establishment.	Presidency allowance and house-rent.	Total salaries.	Travelling allowance.
	Deputy Revenue Superintendents and Deputy Collectors.	Zilladars or Tahsildars.	Other establishment.	Total.	Ameens.	Other establishment.	Total.						
Tank Restoration Scheme.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Head quarter office Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	..
No. I Party, Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	7,056	410
No. II Party, Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	480
No. IV Party, Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	10,248	2,201
No. V Party, Tank Restoration Scheme	..	..	..	..	..	..	..	..	..	..	..	..	531
No. VII Party, Kistna Western division	..	..	..	..	..	..	..	..	..	..	..	..	994
No. VIII Party, Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	..	..	272
Special Tank Restoration Scheme, Chinglepet	..	..	..	..	..	..	..	..	..	..	..	..	213
Investigation Party, Kistna district	..	..	..	..	..	..	..	..	..	..	..	..	500
Examiner's division	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	..	..	..	..	17,304	5,601
Reserve with Government ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. with Military Works Department ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	..	..	..	..	..	..	..	1,49,754	..	..	25,420	16,47,526	2,04,000
Military pay and allowances ..	..	..	..	..	..	..	..	..	..	..	..	52,638	..
Maintenance allowance of the students of the College of Engineering during practical year of training	..	..	..	..	..	..	..	..	..	..	..	2,280	..
Temporary establishment ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Minor works, Revenue Department	..	..	..	..	..	..	..	..	..	..	..	..	..
Old maintenance charges ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	..	..	..	..	..	..	..	1,49,754	..	..	25,420	18,74,824	2,04,000

* Includes grant of Rs. 31,000 under 43. Local.

Contingencies and postage.	Grand Total establishment.	Grant for Works and Repairs.									Estimated Receipts.	
		Imperial.			Provincial.		Contributions.	Incorporated Local Fund.	Excluded Local.		Total.	Military Works and Civil Works.	Productive Public Works Minor Irrigation and Minor Works and Navigation.
		Military Works.	Civil Works.	Productive Public Works.	Civil Works.	Minor Works and Navigation.			University Fee Fund.	Port Fund.			
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
293	293	..	..	..	..	2,000	..	..	..	..	2,000	..	..
63	7,529	..	..	..	..	3,400	..	..	..	..	3,400	..	..
63	543	..	..	..	..	3,600	..	..	..	..	3,600	..	..
627	13,076	..	..	..	..	4,100	..	..	..	..	4,100	..	..
202	733	..	..	..	..	4,400	..	..	..	..	4,400	..	..
477	1,471	..	..	..	..	2,400	..	..	..	..	2,400	..	..
..	272	..	..	..	..	2,500	..	..	..	..	2,500	..	..
21	234	..	..	..	..	3,000	..	..	..	..	3,000	..	..
..	500	..	..	..	..	..	..	..	..	..	..	..	..
735	735	..	..	..	..	..	..	..	..	..	..	..	..
2,481	25,386	..	..	..	..	29,000	..	..	..	..	29,000	..	..
..	..	2,720	1,300	..	1,72,931	25,000	..	..	..	..	2,01,951	..	..
..	..	..	500	..	4,230	..	..	..	..	..	4,730	..	..
48,500	19,00,026	72,200	18,500	21,93,222	16,08,535	19,00,855	..	20,740	..	..	58,14,052	..	..
..	52,638	..	..	..	..	..	..	..	..	..	..	..	..
..	2,280	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	4,00,000	..	..	..	..	4,00,000	..	..
..	..	..	..	1,49,847	..	1,40,847	..	..	..	..	..	..	..
48,500	21,27,324	72,200	18,500	20,52,375	16,08,535	*24,41,702	..	20,740	..	..	62,14,052	1,24,100	4,07,000

Rs. 31,000 under 43. Local.

Note. The figures given in this Appendix have been taken from the preliminary issues of budget estimates under all heads.

PROVINCIAL.
CIVIL WORKS.

GOVERNMENT OF MADRAS.

APPENDIX E.

STATEMENT SHOWING THE APPROXIMATE PERCENTAGE WHICH THE CHARGES FOR ESTABLISHMENT BEAR TO THE ESTIMATED EXPENDITURE ON WORKS AND REPAIRS IN CONNECTION WITH CIVIL WORKS AND IRRIGATION WORKS IN MADRAS FOR THE YEAR 1891-92.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.	Remarks.
		Rs.	Rs.	Rs.	Rs.		
Imperial ...	Military Works ...	~~28,784~~ 2634	45,000	~~73,784~~ 67634	~~17,171~~ 14879	~~23·2~~ 22·0	
	Civil Works— Civil Buildings ..	~~28,787~~ 27886	15,420	~~44,207~~ 43106	~~10,039~~ 9809	22·7	
Provincial ...	Civil Works— Civil Buildings ...	151282	191104	1707386	...	...	
	Communications ...	349426	136600	486026	...	...	
	Miscellaneous Public Improvements.	12278	16264	28542	...	...	
	Total ...	1877956	343968	2221954	~~4,70,000~~ 2,19,500	~~18·8~~ 19·8	
Local Incorporated.	Civil Works— Civil Buildings ...	3,885	2886	...	...	...	
	Communications ...	~~59,879~~ 84,492	~~23,090~~ 80	...	...	...	
	Miscellaneous Public Improvements.	~~180~~ 1613		...	...	...	
	Total ...	~~63,944~~ 91957	~~24,070~~ 26243	~~88,014~~ 1,18,000	~~15,320~~ 39728	~~17·4~~ (a) 34·2	
Local Excluded ...	Civil Works— Civil Buildings ..	...	3912 ~~3,547~~	...	...	...	
	Communications ...	...	...	...	...	...	
	Miscellaneous Public Improvements.	13,217 3801	~~7,396~~ 6893	...	...	...	
	Total ...	~~13,217~~ 3801	~~10,943~~ 10705	~~24,160~~ 14608	~~5,562~~ 3344	23·0	
Works in Estates under the Court of Wards.	.....	...	...	~~50,245~~ 53638	~~11,556~~ 12333	23·0	
	Total, General Branch.	...	...	~~27,72,809~~ 25,16,938	~~5,20,648~~ 5,20,117	~~19·1~~ 20·7	
Imperial ...	35. Protective Works.	5,16,722	...	5,16,722	1,18,501	22·9	
	42. Major Works Working expenses.	~~1,21,692~~ 1,15,092	~~5,26,016~~ 5,32,566	~~6,47,708~~ 6,47,658	~~4,43,977~~ 443,968	~~68·5~~ (b)	
	49. Capital expenditure on Major Works.	~~11,00,897~~ 11,58,627	...	~~11,00,897~~ 11,58,627	~~2,42,478~~ 2,58,233	22·0 22·3	
		10,16,313	20,36,676	30,52,989	8,17,840		
Provincial ...	43. Minor Works and Navigation.	~~10,52,120~~ 15,000	~~19,93,642~~ ~~6,500~~	~~30,45,781~~ 20,6504	~~8,20,669~~	(c) ~~26·9~~	
Local Incorporated.	Do. do.	~~21,748~~	~~5,000~~ 5,000	~~26,748~~ 23,000	...	...	
	Total, Irrigation Branch.	~~28,13,198~~ 25,23,764	~~25,24,658~~ ~~25,74,000~~ 25,73,242	~~53,37,856~~ ~~5,98,500~~ 53,96,906	~~16,25,625~~ 16,38,540	~~30·4~~ 30·4	
	Grand Total ...	...	...	~~81,10,665~~ 79,60,678	~~21,55,273~~ 21,58,657	~~26·5~~ 27·3	
				79,13,934			

(a) Includes 5 p.c. on revenue and 2½ p.c. on the amount of Local Fund Estimates the scrutinised by the P.W.D.

(b) Includes 10 p.c. on direct receipts and 6 p.c. on the increase of Irrigation Revenue due to major works

(c) Includes 10 p.c. on direct receipts & 6 p.c. on revenue due to old irrigation under major works and the cost of special establishment employed for the investigation of Tank Restoration and Kistna upland projects

GOVERNMENT OF MADRAS.

APPENDIX E.

STATEMENT SHOWING THE TRUE PERCENTAGE WHICH THE CHARGES FOR ESTABLISHMENT BEAR TO THE ACTUAL EXPENDITURE ON WORKS AND REPAIRS IN CONNECTION WITH CIVIL WORKS AND IRRIGATION WORKS IN MADRAS FOR THE YEAR 1890–91.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.	Remarks.
		Rs.	Rs.	Rs.	Rs.		
Imperial ...	Military	41,016	51,119	92,135	21,089	22·8	
	Civil Works— Civil Buildings.	6,548	14,058	20,606	4,739	22·9	
Provincial ...	Civil Works— Civil Buildings ...	12,79,436	2,21,559	15,00,995	...		
	Communications ...	3,18,424	1,30,954	4,49,378	...		
	Miscellaneous Public Improvements.	42,748	14,025	56,773	...		
	Total ...	16,40,608	3,66,538	20,07,146	4,36,231	21·7	
Local Incorporated	Civil Works— Civil Buildings ...	6,737	...	6,737	...		
	Communications ...	17,473	34,526	51,999	...		
	Miscellaneous Public Improvements.	614	...	614	...		
	Total ...	24,824	34,526	59,350	28,479	(a) 47·9	
Local Excluded ...	Civil Works— Civil Buildings ...	150	1,897	2,047	...		
	Communications ...	...	...	...	...		
	Miscellaneous Public Improvements.	8,687	4,013	12,700	...		
	Total ...	8,837	5,910	14,747	3,389	22·9	
Works in Estates under the Court of Wards.	.....	...	...	75,709	17,360	22·9	
	Total, General Branch.	...	...	22,69,693	5,11,287	22·5	
Imperial ...	35. Protective Works.	3,68,921	...	3,68,921	82,042	22·2	
	42. Major Works (Working Expenses).	1,62,473	5,38,529	7,01,002	4,59,239	(b) 65·5	
	49. Capital Expenditure on Major Works.	12,17,313	...	12,17,313	2,65,975	21·8	
Provincial ...	43. Minor Works and Navigation.	10,02,283	17,40,062	27,42,345	7,10,147	(c) 25·8	
Local Incorporated.	Do. do. ...	9,373	3,346	12,719	...	...	
	Total, Irrigation Branch.	...	...	50,42,300	15,17,403	30·0	
	Contributions ...	...	...	...	15,335	...	
	Grand Total ...	...	...	73,11,993	20,44,025	27·9	

(a) Includes 5 p.C. on revenue and 2½ p.C. on the amount of Local Fund Estimates scrutinised by the P.W.D.

(b) Includes 10 p.C. on direct receipts and 6 p.C on the increase of Irrigation Revenue due to major works.

(c) Includes 10 p.C. on direct receipts and 6 p.C. on revenue due to old irrigation under major works and the cost of special establishment employed for the investigation of Tank Restoration Work.

GOVERNMENT OF MADRAS.

APPENDIX E.

STATEMENT SHOWING THE APPROXIMATE PERCENTAGE WHICH THE CHARGES FOR ESTABLISHMENT BEAR TO THE ESTIMATED EXPENDITURE ON WORKS AND REPAIRS IN CONNECTION WITH CIVIL WORKS AND IRRIGATION WORKS IN MADRAS FOR THE YEAR 1892–93.

Service.	Class.	New Works.	Repairs.	Total Outlay.	Establishment.	Percentage on Outlay.	Remarks.
		Rs.	Rs.	Rs.	Rs.		
Imperial ...	Military Works ...	27,200	45,000	72,200	16,700	23·1	
	Civil Works— Civil Buildings ...	3,500	15,000	18,500	4,250	22·9	
Provincial ...	Civil Works— Civil Buildings ...	10,99,156	1,69,690	12 68,846	...	...	
	Communications ...	2,07,879	1,15,200	3,23,079	...	...	
	Miscellaneous Public Improvements.	1,500	15,110	16,610	...	...	
	Total ...	13,08,535	3,00,000	16,08,535	6,11,465	38·0	
Local Incorporated.	Civil Works— Civil Buildings ...	...	...	...	...	...	
	Communications ...	1,050	19,690	...	...	...	
	Miscellaneous Public Improvements.	...	...	...	...	...	
	Total ...	1,050	19,690	20,740	8,075	(a) 38·9	
Local Excluded ...	Civil Works— Civil Buildings ..	..	...	...	...	...	
	Communications ...	...	...	...	...	...	
	Miscellaneous Public Improvements.	...	...	...	...	...	
	Total ...	...	...	...	...	...	
Works in Estates unde the Court of Wards.	.....	11,600	20,000	31,600	7,268	23·0	
	Total, General Branch.	13,51,885	3,99,690	17,51,575	6,47,758	36·9	
Imperial ...	35. Protective Works	3,62,602	...	3,62,602	83,398	22·9	
	42. Major Works Working expenses	1,32,286	5,17,854	6,50,140	4,59,050	(b) 70·6	
	49. Capital expenditure on Major Works.	10,37,332	...	10,37,332	2,26,948	21·8	
Provincial ...	43. Minor Works and Navigation.	8,33,686	15,77,016	24,10,702	7,10,170	(c) 29·4	
Local Incorporated.	Do. do. ...	31,000	...	31,000	...	...	
	Total, Irrigation Branch.	23,96,906	20,94,870	44,91,776	14,79,566	32·9	
	Grand Total ...	37,48,791	24,94,560	62,43,351	21,27,324	34·0	

(a) Includes 5 p.C. on revenue and 2½ p.C. on the amount of L.F. estimates to be scrutinised by the P.W.D.

(b) Includes 10 p.C. on direct receipts and 6 p.C on the increase of Irrigation Revenue due to major works

(c) Includes 10 p.C. on direct receipts and 6 p.C. on revenue due to old irrigation under major works & the cost of special establishment employed on the investigation of Tank Restoration and

Printed at the Government Press, Madras.

Provincial Civil Works

Estimates amount of receipt and charges of the General Branch of the Madras Civil Works Department for the years 1891-92 and 1892-93

Accounts.	Budget Estimate for 1892-93.	Revised Estimate for 1891-92.
1	2	3
To Balance.		
Cash in chest (including imprests)	37,000	37,000
Cash in hands of Civil Officers	"	"
To Civil Department	97,57,100	107,26,000
To Central Adjusting Account	800	400
To Telegraph Department	1,900	2,000
To Transfers of the Public Works Department.		
Divisional	9,97,000	6,10,000
General	40,300	54,300
Irrigation	4,07,000	4,17,000
State Railways	16,000	30,500
To Guaranteed Railways	16,800	1,200
To London Account.		
Stores		
Miscellaneous	1,53,500	1,15,200
	500	600
(Applicable only when used for estimates of Buildings and Roads Branch.)		
To Imperial Revenue Receipts.		
Military Works		
Civil Works	2,000	1000
To Provincial Revenue Receipts	"	"
To Incorporated Local Fund Receipts	1,18,000	118,000
	4,000	4,000
(Applicable only when used for estimates of Irrigation Branch.)		
To Imperial Revenue Receipts.		
Major Works—Direct receipts		
Minor Works and Navigation		
To Provincial Revenue Receipts.		
Major Works—Direct receipts		
Minor Works and Navigation		
To Incorporated Local Fund Receipts.		
Minor Works and Navigation		
Generally Applicable.		
To Income Tax		
To Suspense Accounts (not affecting the Budget Grant)	38,000	38,000
Deposits	2,76,000	2,19,000
Tuccavee Advances	"	"
Contributions by Native States	"	"
Famine Relief	"	"
Civil Engineers' Provident Fund	75,400	128,500
	"	"
Grand Total	119,41,300	125,02,700

Madras,
April 1892.

50—13-5-91.

Madras

Civil Works Department for the years 1891-92 and 1892-93

Accounts.	Budget Estimate for 1892-93.	Revised Estimate for 1891-92.
4	5	6
Civil Department	15,53,500	7,41,700
Central Adjusting Account	4,800	4,300
Telegraph Department	600	800
Transfers of the Public Works Department.		
Divisional	9,97,000	6,10,000
General	23,000	66,300
Irrigation	61,27,000	72,77,000
State Railways	43,000	26,000
State Outlay on Guaranteed Railways	157,000	1,26,000
Subsidized companies	1,20,000	60,000
Guaranteed Railways	3,600	
London Account.		
Miscellaneous		
(Applicable only when used for estimates of Buildings and Roads Branch.)		
Expenditure against Imperial Budget Grant.		
Military Works	90,000	83,500
Civil Works	31,500	53,600
Special Defence Works	23,00,000	29,00,000
Expenditure against Provincial Budget Grant	29,000	1,70,000.
Expenditure against Incorporated Local Fund Budget Grant		
(Applicable only when used for estimates of Irrigation Branch.)		
By Expenditure against Imperial Budget Grant.		
Net capital expenditure on Irrigation works not charged against Revenue		
Net charges for Major Works—Working Expenses		
Net charges for Minor Works and Navigation		
Net charges for Famine Relief and Insurance—Construction of Protective Irrigation Works		
By Expenditure against Provincial Budget Grant.		
Net charges for Major Works—Working Expenses		
Net charges for Minor Works and Navigation		
By Expenditure against Incorporated Local Fund Budget Grant.		
Net charges for Minor Works and Navigation		
(Applicable only when used for estimates of State Railways Branch.)		
By Expenditure against Budget Grant.		
Preliminary Expenses.		
Survey		
Survey		
Survey		
Generally Applicable.		
By Suspense Accounts (not affecting the Budget Grant).		
Deposits	274,000	2,18,000
Tuccavee Advances	"	"
Expenditure against Contributions by Native States	"	"
Famine Relief	75,400	1,28,500
Civil Engineers' Provident Fund	"	"
Total	119,04,300	124,65,700
By Balance.		
Cash in chest (including imprests)	37,000	37,000
Cash in hands of Civil Officers	"	"
Grand Total	119,41,300	125,02,700.

S. S. Shelford-Hubbard
Examiner, P. W. Accounts, Madras.

Very Urgent

Proof

May 21/6

E.2
P.W 3848/52

GOVERNMENT OF MADRAS.

APPENDIX D.

ESTIMATED AMOUNT OF RECEIPTS AND CHARGES OF THE GENERAL BRANCH, PUBLIC WORKS DEPARTMENT, FOR THE YEARS 1891-92 AND 1892-93.

Accounts.	Budget Estimate for 1892-93.	Revised Estimate for 1891-92.	Accounts.	Budget Estimate for 1892-93.	Revised Estimate for 1891-92.
1	2	3	4	5	6
	Rs.	Rs.		Rs.	Rs.
To Balance—			By Civil Department ...	15,53,500	7,41,700
Cash in chest (including imprests)	37,000	37,000	„ Central Adjusting Account	4,800	4,300
Cash in hands of Civil officers	...	...	„ Telegraph Department	500	800
„ Civil Department ...	97,57,100	1,07,26,000	„ Transfers of the Public Works Department—		
„ Central Adjusting Account	800	400	Divisional	9,97,000	6,10,000
„ Telegraph Department	1,900	2,000	General	23,000	66,300
„ Transfers of the Public Works Department—			Irrigation	61,27,000	72,77,000
Divisional	9,97,000	6,10,000	State Railways	48,000	26,000
General	40,300	54,300	State Outlay on Guaranteed Railways	1,57,000	1,26,000
Irrigation	4,07,000	4,17,000	Subsidized Companies	1,90,000	60,000
State Railways	16,000	30,500	„ Guaranteed Railways	3,600	...
„ Guaranteed Railways	16,800	1,200	„ London Account—		
„ London Account—			Miscellaneous	...	...
Stores	1,53,500	1,15,200			
Miscellaneous	500	600			
(Applicable only when used for Estimates of Buildings and Roads Branch.)			*(Applicable only when used for Estimates of Buildings and Roads Branch.)*		
„ Imperial Revenue Receipts—			Expenditure against Imperial Budget Grant—	90,000	83,500
Military Works	2,000	1,000	„ Military Works	31,500	53,600
Civil Works	...	...	Civil Works	...	...
„ Provincial Revenue Receipts	1,18,000	1,18,000	Special Defence Works	23,00,000	29,00,900
„ Incorporated Local Fund Receipts	4,000	4,000	Expenditure against Provincial Budget Grant	29,000	1,70,000
			„ Expenditure against Incorporated Local Fund Budget Grant		
Generally applicable.			*Generally applicable.*		
„ Income-tax	38,000	38,000	Suspense Accounts (not affecting the Budget Grant)—	2,74,000	2,18,000
„ Suspense Accounts (not affecting the Budget Grant)—			„ Deposits	...	...
Deposits	2,76,000	2,19,000	Tuccavee Advances	...	...
Tuccavee Advances	...	...	Expenditure against Contributions by Native States	75,400	1,28,500
Contributions by Native States	...	...	Famine Relief	...	...
Famine Relief	75,400	1,28,500	Civil Engineers' Provident Fund		
Civil Engineers' Provident Fund	...	...	Total ...	1,19,04,300	1,24,65,700
			„ Balance—		
			Cash in chest (including imprests)	37,000	37,000
			Cash in hands of Civil officers	...	...
Grand Total ...	1,19,41,300	1,25,02,700	Grand Total ...	1,19,41,300	1,25,02,700

Provincial Services

Public Works Budget Estimate.

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Distributions of provision

Circles and Divisions	Chief Engineers		Superintending Engineers		Examiners		Deputy and Assistant Examiners		Under Secretaries		Executive Engineers		Assistant Engineers		Upper Subordinates		Lower Subordinates		Accountants		Office Establishment		Petty Establishment	Medical Establishment	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost			
Brought forward	2	45,360	7	95,256	1	18,384	3	15,000	2	17,640	37	2,96,096	37	1,81,696	181	3,36,552	33	16,260	51	77,030	849	3,14,600	51,768	4,710
Military Pay and Allowances	"	2,922	"	8,256	"	"	"	"	"	"	"	26,496	"	2,280	"	12,684	"	"	"	"	"	"	"	"
Maintenance Allowances of the students of the College of Engineering during Practical year of training	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,250	"	"	"	"	"	"	"	"
Temporary Establishment	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Minor Works. Rev: Department																								
Old maintenance charges.																								
Grand Total ~~Establishment~~	2	48,282	7	103,512	1	18,384	3	15,000	(a) 2	17,640	(b) 37	(c) 3,22,572	37	(c) 1,83,976	181	(c) 3,51,516	33	16,260	51	(c) 77,030	849	(c) 3,14,600	51,768	(c) 4,710

Grand Total Establishment	Charges not classed under Establishments and Allowances	Establishment and Allowances
Engineers Subordinate	Buildings and Roads	Military Pay and Allowances
Engineers	Irrigation	Maintenance Allowances of the students of the College of Engineering during Practical year of training
Accountants	Navigation	Temporary Establishment
Office Establishment	Embankments	Minor Works. Rev: Department
Petty Establishment	Establishments charged to Irrigation	Old maintenance charges.
Medical Establishment	Establishments charged to Navigation	
	Establishments charged to Buildings and Roads	
	Establishments charged to Embankments	
	Establishments charged to Miscellaneous Public Improvements	
	Establishments charged to Civil Departments	
	Establishments charged to Local Funds	
	Establishments charged to Municipal Funds	
	Establishments charged to Port Funds	
	Establishments charged to Provincial Funds	
	Establishments charged to Miscellaneous Departments	
	Establishments charged to Stationery and Printing	
	Establishments charged to Miscellaneous	
	Establishments charged to Public Works Establishments	
	Establishments charged to Civil Works	
	Establishments charged to Irrigation	

Provincial Services

Public Works Budget Estimate

App[x]

Distribution of provision

Circles and Divisions	Chief Engineers		Superintending Engineers		Examiners		Deputy and Assistant Examiners		Under Secretaries		Executive Engineers		Assistant Engineers		Upper Subordinates		Lower Subordinates		Accountants		Office Establishment		Allowances to Establishment	Medical Establishment	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost			
Brought forward	2	46,360	5	65,620	1	18,384	3	15,000	2	17,640	22	1,70,480	24	1,12,888	112	2,09,364	24	12,120	37	63,260	660	2,49,936	37,607	2061	
5th Circle																									
Superintending Engineer	"	"	1	16,128	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,322	288	"	
Chingleput Division	"	"	"	"	"	"	"	"	"	"	1	8,064	1	5,040	15	26,784	1	600	1	1,380	27	7,032	1,941	"	
South Arcot do	"	"	"	"	"	"	"	"	"	"	1	8,064	1	5,040	8	15,060	1	420	1	1,380	21	6,132	1,725	"	
Public Works Stores do	"	"	"	"	"	"	"	"	"	"	"	"							1	1,380	9	2,660	864	"	
Public Works Workshops do	"	"	"	"	"	"	"	"	"	"	"	"	1	5,040	1	3,384	1	600	1	930	14	4,386	2,016	"	
Carnpore Division	"	"	"	"	"	"	"	"	"	"	2	15,624	1	3,528	7	9,912	1	300	1	1,380	19	5,760	1,681	"	
Nagapattam do	"	"	"	"	"	"	"	"	"	"	1	7,056	1	5,040	4	7,236	"	"	1	930	15	4,500	1,076	"	
Temporary Establishment																									
Total	"	"	1	16,128	"	"	"	"	"	"	5	38,808	6	23,688	35	62,376	4	1,920	6	7,380	119	39,792	9,490	"	
6th Circle																									
Superintending Engineer	"	"	1	13,608	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,322	288	"	
Pychinopoly Division	"	"	"	"	"	"	"	"	"	"	1	10,176	1	5,040	6	9,600	2	720	1	930	16	4,938	1,221	"	
Madura do	"	"	"	"	"	"	"	"	"	"	2	15,120	1	5,040	8	14,364	2	900	1	1,380	20	5,672	1,581	"	
Timnevelly do	"	"	"	"	"	"	"	"	"	"	1	9,576	1	5,040	8	12,756	1	600	1	1,380	20	5,970	1,581	"	
Mr. H. Serjeant do	"	"	"	"	"	"	"	"	"	"	1	8,064	3	15,120	5	12,408	"	"	1	1,380	"	"	"	"	
	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

Provincial Services
Public Works Budget Estimate.

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Distributions of provision

Circles and Divisions	Chief Engineers		Superintending Engineers		Examiners		Deputy and Assistant Examiners		Under Secretaries		Executive Engineers		Assistant Engineers		Upper Subordinates		Lower Subordinates		Accountants		Office Establishment		Allowances not Establishment	Arrears Establishment
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost		
Chief Engineer and Secretary	2	45,360	"	"	"	"	"	"	2	17,640	"	"	"	"	"	"	"	"	"	"	81	57,640	504	"
Consulting Architect	"	"	1	13,608	"	"	"	"	"	"	"	"	1	5,040	6	19,668	2	1,380	1	1,380	23	9,534	1,608	"
Examiner of Public Works Accounts	"	"	"	"	1	18,384	3	15,000	"	"	"	"	"	"	"	"	"	"	15	35,620	93	35,394	216	"
~~Temporary Establishment~~	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Total	2	45,360	1	13,608	1	18,384	3	15,000	2	17,640	"	"	1	5,040	6	19,668	2	1,380	16	37,000	197	104,568	2328	"
1st Circle																								
Superintending Engineer	"	"	1	11,088	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,682	288	"
Ganjam Division	"	"	"	"	"	"	"	"	"	"	1	7,056	1	5,040	5	7,392	1	300	2	2,070	21	5,484	1,401	"
Vizagapatam do	"	"	"	"	"	"	"	"	"	"	1	8,064	2	11,280	7	13,044	2	1,020	1	930	28	8,336	2,409	792
Godaveri Eastern do	"	"	"	"	"	"	"	"	"	"	1	9,576	2	1080	8	11,604	"	"	2	2,070	43	10,912	3,489	612
Godaveri Western do	"	"	"	"	"	"	"	"	"	"	1	7,176	2	8,568	7	12,780	2	720	2	2,070	31	9,114	1,891	"
Kistnah do	"	"	"	"	"	"	"	"	"	"	2	14,120	1	5,040	6	9,132	1	600	2	2,070	19	5,400	1,473	"
~~Temporary Establishment~~	"	"	"	"	"	"	"	"	"	"														
Total	"	"	1	11088	"	"	"	"	"	"	6	45,992	8	40,008	33	63,952	6	2,640	9	2210	156	47,928	10,941	1,404
2d Circle																								
Superintending Engineer	"	"	1	13,608	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,682	288	"
Kistna Eastern Division	"	"	"	"	"	"	"	"	"	"	1	8,064	2	8,568	3	5,796	1	600	2	2,070	19	6,940	3825	"
Kistna Western Division	"	"	"	"	"	"	"	"	"	"	2	14,112	2	5,040	7	7,092			1	1,380				

Provincial Services

Public Works Budget Estimate

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Distribution of provision

Circles and Divisions	Chief Engineers		Superintending Engineers		Examiners		Deputy and Assistant Examiners		Under Secretaries		Executive Engineers		Assistant Engineers		Upper Subordinate		Lower Subordinate		Accountants		Office Establishment		Office Establishment	Medical Establishment
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost		
15	2	4	2	4	2	4	2	4	2	4	3	5	2	5	X 3	4	3	4	3	4	3	4	4	4
Chief Engineer and Secretary	2	45360	"	"	"	"	"	"	2	17640	"	"	"	"	"	"	"	"	"	"	81	59,640	504	"
Consulting Architect	"	"	1	13,608	"	"	"	"	"	"	"	"	1	5040	6	19,668	2	1380	1	1380	23	7531	1608	"
Examiner of Public Works Accounts	"	"	"	"	1	18,384	3	15000	"	"	"	"	"	"	"	"	"	"	15	35620	93	35394	216	"
Temporary Establishment	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Total	2	45360	1	13,608	1	18,384	3	15,000	2	17640	"	"	1	5,040	6	19,668	2	1,380	16	37,000	197	104,568	2328	"
1st Circle																								
Superintending Engineer	"	"	1	11,088	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,682	288	"
Ganjam Division	"	"	"	"	"	"	"	"	"	"	1	7,056	1	5,040	5	7,392	1	300	2	2,070	21	5,484	1401	"
Vizagapatam do	"	"	"	"	"	"	"	"	"	"	1	8,064	2	11,280	7	13,044	2	1,020	1	930	28	8,336	2409	792
Godaveri Eastern do	"	"	"	"	"	"	"	"	"	"	1	9,576	2	1080	8	11,604	"	"	2	2,070	43	10,912	3489	612
Godaveri Western do	"	"	"	"	"	"	"	"	"	"	1	7,176	2	8,568	7	12,780	2	720	2	2,070	31	9,114	1881	"
Kurnkulya do	"	"	"	"	"	"	"	"	"	"	2	14,120	1	5,040	6	9,132	1	600	2	2,070	19	5,400	1473	"
Temporary Establishment	"	"	"	"	"	"	"	"	"	"														
Total	"	"	1	11,088	"	"	"	"	"	"	6	45,792	8	40,008	33	63,952	6	2,640	9	9,210	156	47,928	10,941	1404
2nd Circle																								
Superintending Engineer	"	"	1	13,608	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14	8,682	288	"
Kistna Eastern Division	"	"	"	"	"	"	"	"	"	"	1	8,064	2	8,568	3	5,796	1	600	2	2,070	19	5,940	3825	"
Kistna Western Division	"	"	"	"	"	"	"	"	"	"	2	14,112	2	5040	7	7002	"	"	1	1380	20	6,120	1[illegible]	"

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| | | |

(a) To be included under Executive Engineers
(b) Includes a foreign office
(c) Includes Local and charges allowances with the exception of Presidency allowances and House Rent

It is requested that in any further communication on this subject the under-mentioned letter and

P.W.(W)

G.O.NO 1347

D.F. 284/1892

It is requested that in any further communication on this subject the under-mentioned letter and number may be quoted, and the reply addressed to—

The Director General of Stores,
India Office,
Whitehall,
S.W.

L. 15502.

India Office,
Whitehall, S.W.
25th March 1892.

Sir,

With reference to the indent for a fire engine &c. received with your letter No. 606 W, dated 3rd March 1891, I have the honor to enclose, for the guidance of the officer concerned, a copy of a letter dated 19th March 1892, from Messrs. Shand, Mason & Co. which gives particulars of the tests made with the engine, which they have supplied.

The engine is now ready for shipment and will be despatched at the earliest opportunity. The delay has been on the part of the contractors who have been repeatedly urged to make earlier delivery.

I have the honor to be,
Sir,
Your obedient servant,

F. Tucker
Director General of Stores.

The Secretary to Government,
Public Works Department,
Madras.

Y 22090. 10 rms.—11/91. I. 2321.

a greater height would have been obtained if we could have run continuously for a few minutes, but this is impossible as our neighbours complain of the water which is carried by the wind into their premises.

We trust to again receive your esteemed orders, and shall always do our utmost to merit their continuance.

We are &c.,
(Sd). Shand, Mason & Co.

No. 605-6-7 W dy 3-3-91.

Govt Asst

No. 1250 W dy 20th April 1892

Communicated to the Consulting Architect with reference to G.O. 605 W dated 3rd March 1891.

C.A. to Govt.

3

L. 2041.

Upper Ground Street,
Blackfriars Road.
March 19th, 1892.

The Director General of Stores
India Office, Whitehall, S.W.

Sir,

In accordance with the promise we made in our letter of the 24th February, we now hand you the following particulars of the tests made before your Inspectors on the 8th inst. of the Double Cylinder Steam Fire Engine which we are supplying to your order:-

Cold water in boiler, and from time of lighting the fire a steam pressure was obtained of:-

5 lb.	in 3	minutes 10	seconds
10 .	3	. 33	.
20 .	4	. 11	.
30 .	4	. 45	.
60 .	5	. 25	.
100 .	5	. 56	.

We have a measuring tank which contains 100 gallons for every 6 inch in depth, and can direct a jet either into this tank or to waste by means of a lever. With 120 lb. of Steam and 160 lb. of Water pressure, and 1 3/8" jet, we delivered 450 gallons into the tank.

With 120 lb. of steam, 120 lb. of Water pressure, and 1 5/8" jet we delivered 494 gallons per minute.

As we stipulated the Engine would deliver 450 gallons per minute, we think the above results are worthy of notice

With 110 lb. of steam, 120 lb water pressure 1 1/4" jet, the water was thrown to a height of 160 feet, this being measu d against the shaft of our works. No doubt

a