(1) பக்கங்களின் எண்ணிக்கை 32

(2) புதுக்கித் திருப்பிய நாள் 9.3.90

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P. W. D துறை

(10)

அரசாணை எண்.
மு. கோப்புத் தாள் எண். 3091

அச்சகம்
பலவகை

நாள் : 1 — 11 — 1889 1988.

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

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3091

TWENTY-SECOND ANNUAL

REPORT ON THE LIGHT-HOUSES AND LIGHT-VESSELS

OFF THE COAST OF BURMA

FOR

The year 1888-89.

RANGOON:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.
1889.

[Price,—Six annas.]

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RESOLUTION

ON THE

REPORT ON THE LIGHT-HOUSES AND LIGHT-VESSELS OFF THE COAST OF BURMA

FOR

The year 1888-89.

Extract from the Proceedings of the Chief Commissioner, Burma, in the Financial Department,—No. 11L.H., dated the 17th June 1889.

READ—

Report on the light-houses on the Burma coast for the year 1888-89.

RESOLUTION.—The light-house report was due on the 15th May. It was received on the 1st June. The light-houses were efficiently supervised by the Superintendent throughout the year, and were visited at short intervals by the I. M. S. *Enterprise*. The lights and buildings were kept in satisfactory order and there were no serious accidents of any kind. The Superintendent made his annual inspection in January 1889. The health of the light-keepers was as a whole good, but there were several cases of *beri-beri*, one of which proved fatal.

2. No new lights were exhibited during the year. The *Colombo* continued to serve as floating light vessel at the entrance of the Rangoon river. She was thoroughly overhauled and re-coppered during the year at an outlay of Rs. 11,000, one half of which was borne by the Rangoon Port Commissioners, who also (since November 1888) contribute Rs. 250 a month towards her maintenance during such times as she is actually on duty at the Spit. The Port Commissioners admit that the *Colombo* has proved most useful in enabling vessels to enter and leave the Rangoon river at night.

3. The Public Works Department are awaiting a design which is expected from England for the proposed Oyster Island light-house. It is hoped that the foundation of the light-house may be begun in November next. But the light-house will probably not be completed for about three years. Savage Island light-house is about to be raised 20 feet and a 1st class dioptric light fixed upon it.

4. The revenue derived from the Burma coast lights for the year was Rs. 1,84,490, or Rs. 23,668 less than in 1887-88, when it was exceptionally high. There was a decrease in the receipts at each port, that at Akyab being proportionately the greatest. The cost of maintaining the lights was Rs. 1,36,853, or Rs. 10,241 more than in 1887-88, due in a great measure to the charges for the *Colombo*, which rose from Rs. 5,944 to Rs. 18,294.

5. The Chief Commissioner desires to express his acknowledgments to Captain Warden and Captain Chandler for their careful and successful supervision of the light-houses throughout the year.

By order of the Chief Commissioner,

C. G. BAYNE,
Offg. Secretary.

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TWENTY-SECOND ANNUAL

REPORT ON THE LIGHT-HOUSES AND LIGHT-VESSELS OFF THE COAST OF BURMA

FOR

The year 1888-89.

From Captain F. WARDEN, I.M., Port Officer and Superintendent of Light-houses, Burma, to the Secretary to the Chief Commissioner, Burma,—No. 2084-13L.H.G., dated the 1st June 1889.

I HAVE the honour to submit for the information of the Chief Commissioner the annual report on the light-houses and light-vessels off the coast of Burma together with the statement of receipts and disbursements for the financial year 1888-89.

ALGUADA REEF LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	7,532	2	10
Provisions	3,692	6	3
Oil, stores, &c., as per statement	17,595	4	5
Total ..	28,819	13	6

Working Establishment.

Messrs. Sansom, Jackson, and Stanley, Europeans, 10 Native light-keepers, and two servants.

THIS light has been exhibited regularly throughout the year and the station regularly visited by the I.M.S. *Enterprise*. The relief of crews and the supply of stores and provisions were satisfactorily carried out by that vessel.

The light-house building and lighting apparatus are in good working order, and the necessary stores and provisions, except fresh provisions, now in stock are sufficient to last up to the 30th November next. A new stove has been supplied to this light-house.

The Public Works Department have completed a platform and dwelling-house on the rock close to the light-house for the use of the workpeople who will next north-east monsoon commence the protective operations decided on.

The health of both the European and Native light-keepers has been good, excepting that during December 1888 and February 1889 four Natives were taken ill (two of these men suffering from beri-beri). They were brought up to Rangoon and soon recovered their health. On these two occasions a steam-launch from Bassein visited the light-house owing to the *Enterprise* being away.

Disbursements.—The disbursements during the year amounted to Rs. 28,819-13-6, showing a decrease of Rs. 400-9-3 against the previous year.

TABLE ISLAND OR COCOS ISLAND LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	4,094	2	5
Provisions	1,581	2	4
Oil, stores, &c., as per statement	4,253	14	2
Total ..	9,929	2	11

7 5

Working Establishment.

Mr. Robertson, European light-keeper, five Native light-keepers, two servants, and five labourers.

THIS light has been exhibited regularly throughout the year, and the machinery and building are in good order. The out-houses have lately been repaired.

The health of the light-keepers has been good during the past year.

The garden has been cared for, and the supply of vegetables and fruits sufficient for the crew. Tobacco has also been planted by the European light-keeper in charge, and by last report it is said to be thriving.

Stores and provisions have been supplied to last up to the 30th November next.

Disbursements.—The cost of maintenance of this light-house amounted to Rs. 9,929-2-11, showing a decrease of Rs. 1,920-1-10 against the previous year.

DOUBLE ISLAND LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	2,302	0	0
Provisions	1,472	11	10
Oil, stores, &c., as per statement	5,466	9	8
Total ..	9,141	5	6

Working Establishment.

One Head Native light-keeper in charge, five subordinate Native light-keepers, and one servant.

THIS light has been exhibited throughout the year, excepting that on the 12th March, at 1 A.M., it was reported by the master of the S.S. *Adirondach* as being out for 15 minutes. The Officer Commanding the *Enterprise*, who was desired to enquire into this matter, reported that the pump of the lamp got out of order on the date mentioned. On enquiry here from the serang in charge it was ascertained that the spare pump in the light-room placed there for an emergency was at once fitted in the damaged one's place and that the Liverpool lamp was shown during this time. There was no time lost in replacing the pump.

The buildings have been lately repaired. The light-house and machinery are reported in good working order by Mr. Cully of the Public Works Department, who has been employed on that duty.

The stores and provisions at this light-house, excepting fresh provisions, will last up to the 30th November 1889.

During September last the Native serang and two Native light-keepers were attacked with beri-beri. They were brought to Rangoon and two men recovered, one man having succumbed to the attack. Otherwise the health of the crew at this station has been good throughout the year.

Disbursements.—The cost of maintenance of this light-house amounted to Rs. 9,141-5-6, being an increase of Rs. 1,589-13-3 over the previous year owing to the Public Works Department outlay and for the extra oil supplied to last up to the 30th November next.

SAVAGE ISLAND LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	2,101	5	8
Provisions	756	11	10
Oil, stores, &c., as per statement	2,006	3	0
Total ..	4,864	4	6

Working Establishment.

One Head Native light-keeper in charge, five subordinate Native light-keepers, and one servant.

THE light has been exhibited regularly and the crew has been in good health throughout the year.

This station was regularly visited by the Port Officer of Akyab. The stores and provisions were supplied monthly from that port. It is also well provided with the requisite light stores and fittings.

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This coming season the light-house is to be raised 20 feet and converted into a 1st class light.

Disbursements.—The expenses incurred in the maintenance of this light-house during the year cost Rs. 4,864-4-6, showing a decrease of Rs. 774-4-4.

REEF ISLAND LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	887	0	0
Provisions	1,096	15	3
Oil, stores, &c., as per statement	1,825	6	9
Total ..	3,809	6	0

Working Establishment.

One Head Native light-keeper in charge and three subordinate Native light-keepers.

THE light-house building and the lighting apparatus are in good order, and the light has been exhibited regularly throughout the year.

The stores and provisions, excepting fresh provisions, now at the station will last up to the 30th November next.

Only one case of sickness occurred amongst the light-keepers during the past year, otherwise the health of the men has been good.

Disbursements.—The expenditure incurred during the year amounted to Rs. 3,809-6-0, showing a decrease of Rs. 895-8-8 against the previous year.

EASTERN GROVE LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	1,819	8	3
Provisions	792	2	0
Oil, stores, &c., as per statement	2,534	7	7
Total ..	5,146	1	10

Working Establishment.

One Head Native light-keeper in charge, five subordinate Native light-keepers, and one servant.

THE light has been exhibited regularly and there has been no complaint.

The screw-pile structure, lighting machinery, and fittings are in good order.

The health of the crew has been good throughout the year.

The stores and provisions now at the station will last up to the 30th November next.

Disbursements.—The amount disbursed during the year amounted to Rs. 5,146-1-10, showing a decrease of Rs. 654-0-11 against the previous year.

CHINA BUCKEER LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	1,837	8	10
Provisions	1,713	6	5
Oil, stores, &c., as per statement	4,032	6	10
Total ..	7,583	6	1

Working Establishment.

One Head Native light-keeper in charge, five subordinate Native light-keepers, and one servant.

THIS light has been exhibited regularly throughout the year, and the building and lighting machinery are in good order.

Soundings have been taken round this structure by Mr. Cully and the Officer Commanding the I. M. S. *Enterprise*, and noted by the Public Works Department.

The light-house has been provisioned, excepting fresh provisions, up to the 30th November next, and is well found in stores and fittings.

The health of the crew has been good throughout the year with the exception of two men, who fell sick in April 1888.

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The crew at this station are relieved every second month.

Disbursements.—The cost of maintenance of this light-house during 1888-89 amounted to Rs. 7,583-6-1, showing a decrease of Rs. 282-10-2 against the previous year.

LIGHT-VESSEL "KRISHNA."

Cost of maintenance.

	Rs.	A.	P.
Establishment	13,202	8	2
Provisions	7,060	13	4
Oil, stores, &c., as per statement	12,626	0	3
Total ..	32,889	5	9

Working Establishment.

One Commander, two officers, and 20 men.

THIS vessel was brought up to Rangoon for her annual overhaul and, after such necessary repairs had been executed, she was replaced on her station.

The light and blue-light were exhibited regularly throughout the year, and there has been no complaint.

The stores and provisions, except fresh provisions, now on board will last up to the 30th November next.

There has been no sickness amongst the crew.

Disbursements.—The expenses incurred on account of this vessel during the year amounted to Rs. 32,889-5-9, being a decrease of Rs. 59-7-7 against the previous year.

OYSTER ISLAND LIGHT-HOUSE.

Cost of maintenance.

	Rs.	A.	P.
Establishment	3,282	7	10
Provisions	1,567	7	5
Oil, stores, &c., as per statement	11,526	12	11
Total ..	16,376	12	2

Working Establishment.

One Head Native light-keeper in charge, five subordinate Native light-keepers, and one servant.

THE wooden building is in good order and the light and blue-light exhibited regularly throughout the year.

There was only one case of beri-beri amongst the crew; otherwise the health of the men has been good.

Stores and provisions, except fresh provisions, have been supplied to this station to last up to the 30th November next.

This season an iron light-house of the 1st order will be commenced.

Disbursements.—The expenses incurred in the maintenance of this light-house during the year amounted to Rs. 16,376-12-2, being an increase of Rs. 1,288-5-7 over the previous year. This increase is due to the amount expended for recovery of the buoy laid after the loss of the Oyster Reef light-house and which broke adrift in heavy weather.

LIGHT-VESSEL "COLOMBO."

THIS vessel was placed on the Dalla slip, and repaired and coppered at a cost of Rs. 11,331-11-0 preparatory to her being sent to the Krishna station to relieve the light-vessel *Krishna*. She is now replaced off the Spit as a temporary floating light.

The stores and provisions are supplied monthly to this vessel.

Cost of maintenance.

	Rs.	A.	P.
Establishment	2,410	15	8
Provisions	2,739	7	6
Oil, stores, &c., as per statement	13,143	5	10
Total ..	18,293	13	0

F. WARDEN, CAPTAIN, I.M.,
Superintendent of Light-houses, Burma.

A.—*Receipts and Disbursements of Light-houses and Light-vessels off the Coast of Burma during the financial year 1888-89.*

NAME OF LIGHT-HOUSE OR LIGHT-VESSEL.

Description of heads of credit of light-houses, also the names of the ports of collection.	Amount.	Head of charge.	Table Island.	Double Island.	Savage Island.	Heet Island (Tavoy river).	Eastern Grove.	China Buckeer.	Krishna Light-vessel.	Oyster Island.	Colombo Light-vessel.	Grand total.	Aguada Reef.
	Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
BURMA COAST LIGHT DUES.													
Provincial.													
Rangoon	97,997 6 6	Salaries of establishment ..	4,094 2 5	2,282 0 0	3,101 5 8	887 0 0	1,819 8 3	1,837 8 10	13,202 8 2	3,282 7 10	2,410 15 8	39,939 11 8	7,532 2 10
Moulmein	24,466 0 6	Provisions	1,681 2 4	1,472 11 10	756 11 10	1,006 15 3	792 2 0	1,713 6 5	7,060 13 4	1,567 7 5	2,739 7 6	22,473 4 2	3,602 6 3
Bassein	8,630 15 6	Oil and stores	2,543 0 8	3,155 8 8	388 11 0	732 8 10	1,305 13 9	2,219 6 9	9,668 5 4	8,767 0 10	1,326 13 1	34,431 11 11	4,324 7 0
Akyab	13,416 1 6	Repairs and fittings	...	...	...	...	...	...	1,861 15 6	.....	11,298 15 0	15,090 14 6	...
Kyaukpyu	.....	Contingencies and coal ..	...	119 11 5	309 9 5	41 12 6	74 13 3	142 3 5	937 12 3	1,510 14 9	598 13 5	4,700 13 7	836 7 4
Total ..	1,44,500 8 0	Share of relief and pay of Inspector	962 3 9	962 3 1	962 3 1	962 3 1	962 3 1	962 3 1	.....	962 3 1	.....	7,697 9 5	962 3 9
Calcutta	38,400 12 0	Public Works outlay	348 4 0	1,045 11 6	53 0 0	34 0 0	...	482 1 0	.....	194 12 0	.....	13,520 12 10	11,363 0 4
Chittagong	1,589 3 3	Refund of light dues	28 14 4	28 14 6	28 14 4	28 14 4	28 14 4	28 14 4	28 13 4	28 13 4	28 13 4	288 10 6	28 14 4
GRAND TOTAL ..	1,84,490 7 3	Cost of Europe stores at 1s. 5d. exchange.	126 11 2	154 6 6	63 13 2	36 0 0	202 12 2	197 11 3	189 1 10	57 0 11	.....	1,989 14 8	190 3 8
Other items credited to this head.													
Sale-proceeds of condemned stores.	872 0 1												
Fines and forfeitures of pay, &c.	708 5 9												
Contribution by Port Commissioners towards light-vessel *Colombo*.	300 0 0												
Cash recoveries of service payments in previous years.	1,061 15 0												
Total ..	3,142 10 10	Total ..	9,949 2 11	9,141 5 6	4,864 4 6	3,809 6 0	5,146 1 10	7,583 6 1	32,889 5 9	16,376 12 2	18,293 13 0	1,30,583 7 3	28,819 13 6

	Rs. A. P.
Total disbursements as per Comptroller's books	1,25,592 10 5
Add Public Works Department charges	13,590 12 10
	1,39,183 7 3
Disbursements as per Port Office books, including Public Works Department charges	1,39,833

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B.—*Statement showing Name, Class, and Pay of Light-keepers employed in the several Light-houses and Light-vessels off the Coast of Burma during the year 1888-89.*

Station.	Name.	Class.	Pay per mensem.	Remarks.
		Europeans.	Rs.	
Alguada Reef	H. F. Sansom	1st class	150 to 200	
	J. Jackson	2nd class	120 to 150	
	F. Stanley	3rd class	100 to 120	
Table Island	J. S. Robertson	1st class	150	
Relief, Provincial	J. W. Jarvis	1st class	150	
		Natives.		
Alguada	Appasawny	1st class	30	
	Emam	2nd class	25	
	Apel Nursiah	3rd class	20	
	Chinniah	3rd class	20	
	Appiah	3rd class	20	
	Rungana	3rd class	20	
	Appasawmy	4th class	15	
	Sethiah	4th class	15	
	Rudeiah	4th class	15	
	Lutchmiah	4th class	15	
	Appasawmy	Cook	20	
	Cheliah	Topaz	15	
Oyster Island	Nassir Mahomed	1st class	30	With Rs. 30 as charge allowance.
	Dunradeen	2nd class	25	
	Cormiah	3rd class	20	
	Rungiah	3rd class	20	
	Yankareddy	4th class	15	
	Appiah	4th class	15	
	Adienaran	Servant	12	
Table Island	Appiah	1st class	30	
	Carsuridoo	3rd class	20	
	Soobriedu	3rd class	20	
	Byragee	4th class	15	
	Ram Chundra	4th class	15	
	Appasawmy	Cook	20	
	Rungasawmy	Topaz	15	
	Five labourers at Rs. 12 each		60	
Reef Island, Tavoy	Guntiah	1st class	30	
	Sarthy	3rd class	20	
	Gooriah	4th class	15	
	Ramiah	4th class	15	
Eastern Grove	Balagyi	1st class	30	With Rs. 30 as charge allowance.
	Rajiah	2nd class	25	
	Appiah	3rd class	20	
	Appiah	3rd class	20	
	Yariah	4th class	15	
	Jungoo Meah	4th class	15	
	Lutchmenaran	Servant	12	
China Buckeer	Corban Aly	1st class	30	With Rs. 30 as charge allowance.
	Appasawmy	2nd class	25	
	Apalsawmy	3rd class	20	
	Soobriedoo	3rd class	20	
	Akbar Ali	4th class	15	
	Soobriedoo	4th class	15	
	Mugbhool	Servant	12	
Double Island	Yankrasawmy	1st class	30	With Rs. 30 as charge allowance.
	Ramiah	2nd class	25	
	Pantoo	3rd class	20	
	Ramiah	3rd class	20	
	Karamuth Ali	4th class	15	
	Lingiah	4th class	15	
	Abdul	Servant	12	

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B.—*Statement showing Name, Class, and Pay of Light-keepers employed in the several Light-houses and Light-vessels off the Coast of Burma during the year 1888-89*—concluded.

Station.	Name.	Class.	Pay per mensem.	Remarks.
		Natives—concluded.		
Savage Island	Cormiah	1st class	30	With Rs. 30 as charge allowance.
	Abdool	2nd class	25	
	Kristamah	3rd class	20	
	Ebrahim	3rd class	20	
	Ahniah	4th class	15	
	Naidoo	4th class	15	
	Mahomed	Servant	12	
Relief, Provincial	Jameer	1st class	30	
	Camiah	2nd class	25	
	Gooriah	3rd class	20	
	Madursah	3rd class	20	
	Daniah	4th class	15	
	Nundasee	4th class	15	
	Thermaloo	Servant	12	
Relief, Oyster	Ahmedulla	1st class	30	
	Shaikh Hussain	2nd class	25	
	Kristama	3rd class	20	
	Musolaya	3rd class	20	
	Gooriah	4th class	15	
	Dewalle	4th class	15	
	Gooriah	Servant	12	
		Europeans.		
	J. Smith	Commander	300	On leave.
	A. Hunter	Offg. Commander	210	With mess allowance Rs. 200.
	H. Wessels	Offg. Chief Officer	130	
	C. F. Morrell	Offg. Second Mate	100	
		Natives.		
Light-vessel *Krishna*	Corlia	Serang	30	
	One carpenter		45	
	One tindal		20	
	Two seacunnies at Rs. 25 each		50	
	Two lamp-trimmers at Rs. 17-8-0 each		35	
	One cook		20	
	One table servant		15	
	One bandary		15	
	One cassab		15	
	One topaz		12	
	Eight lascars at Rs. 16 each		128	
Light-vessel *Colombo*	One serang		30	
	One seacunny		25	
	One lamp-trimmer		20	
	One bandary		15	
	One topaz		12	
	Four lascars at Rs. 16 each		64	

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C.—*Statement of Months, Dates, and Names of Officers or Steamers that visited the Light-houses and Light-vessels off the Coast of Burma during the year 1888-89.*

Name of light-house or light-vessel.	Month and name of officer or steamer.											
	April 1888.	May 1888.	June 1888.	July 1888.	August 1888.	September 1888.	October 1888.	November 1888.	December 1888.	January 1889.	February 1889.	March 1889.
Light-vessel *Krishna* ...	*Enterprise* 28th.	*Enterprise* 17th.	*Enterprise* 14th.	...	*Enterprise* 26th.	*Enterprise* 17th.	*Enterprise* 13th.	*Enterprise* 24th. Placed *Colombo* in position and towed *Krishna* to town.	*Enterprise* 23rd. Placed *Krishna* in position and towed *Colombo* to town.	*Enterprise* 14th with Supdt., 22nd with Supdt.	...	...
Alguada Reef light-house	*Enterprise* 30th.	...	*Enterprise* 19th, by signal 23rd.	...	*Enterprise* 25th.	*Enterprise* 1st.	*Enterprise* 12th.	...	*Enterprise* 19th.	*Enterprise* 11th with Supdt., 23rd with Supdt.	...	*Enterprise* 28th.
Cocos Island light-house	*Enterprise* 21st.	...	*Enterprise* 24th.	...	...	...	*Enterprise* 8th.	...	...	*Enterprise* 18th with Supdt.	...	...
Double Island light-house	...	*Enterprise* 18th.	...	...	...	*Enterprise* 27th.	...	*Enterprise* 11th.	...	*Enterprise* 21st with Supdt.	...	...
Savage Island light-house	Port Officer, Akyab.	Port, Officer, Akyab.	Port Officer, Akyab.	Port Officer, Akyab.	Port Officer, Akyab.	PortOfficer. Akyab, *Enterprise* 20th.	Port Officer, Akyab.	Port Officer, Akyab.	Port Officer, Akyab.	Port Officer, Akyab, *Enterprise* 26th with Supdt.	Port Officer, Akyab.	Port Officer, Akyab.
Reef Island light-house...	...	*Enterprise* 19th and 24th.	...	...	*Enterprise* 18th.	...	...	*Enterprise* 12th and 13th.	...	*Enterprise* 20th with Supdt.	...	...
Oyster Island light-house	*Enterprise* 6th.	...	*Enterprise* 27th.	...	...	*Enterprise* 21st.	*Enterprise* 10th.	...	...	*Enterprise* 25th with Supdt.	...	...
Eastern Grove light-house	...	...	By boat 1st	...	...	*Alert* 20th	By boat 3rd, by boat 16th.	By boat 26th	*Alert* 20th	*Alert* 31st ...	By boat 21st.	*Alert* 17th, by boat 7th.
China Buckeer light-house	*Alert* 4th, 9th, 11th, and 13th, *Enterprise* 22nd.	...	*Enterprise* 13th.	*Alert* 14th and 16th.	*Alert* 26th and 31st, *Enterprise* 26th.	*Alert* 6th, 9th, and 23rd, *Enterprise* 16th.	*Alert* 12th and 28th, *Enterprise* 14th.	...	*Alert* 10th	*Alert* 16th, *Enterprise* 19th with Supdt.	...	*Alert* 7th, 13th, and 21st, *Enterprise* 26th.
Light-vessel *Colombo* ...	Weekly by the *Alert*.											

D.—*Statement showing the amount of Provincial and Imperial Light Dues collected by the Port Commissioners during the year 1888-89.*

Description of light dues.	1888-89.	1887-88.	Increase.	Decrease.	Remarks.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Burma coast light dues	97,997 6 6	1,07,867 7 0	.....	9,870 0 6	
Little and Great Basses dues	11,426 4 0	10,866 9 0	559 11 0	.....	
Minicoy light dues	3,151 1 11	3,089 1 10	62 0 1	.....	
Straits light dues	579 5 0	896 8 6	.....	317 3 6	
By the Port Officer. Total ...	1,13,154 1 5	1,22,719 10 4	.....	9,565 8 11	
Sale of unserviceable stores	872 6 1	863 13 6	8 8 7	.....	
Miscellaneous	708 5 9	166 12 4	541 9 5	.....	
Contribution by Port Commissioners towards F. L. V. *Colombo.*	500 0 0	.....	500 0 0	.....	
Total ...	2,080 11 10*	1,030 9 10	1,050 2 0	.....	

	Rs. A. P.
*By the Port Officer	2,080 11 10
By the Comptroller—Cash recoveries of service payments in previous years	1,061 15 0
Total ...	3,142 10 10

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E.—*Statement showing the Expenditure incurred by the Public Works Department on Light-houses off the Coast of Burma during the year 1888-89.*

Particulars.	Outlay.	Remarks.
Original Works.	Rs. A. P.	
Constructing an iron platform at the Alguada Reef light-house	4,042 2 8	
Extension of iron platform at Alguada reef	4,119 12 4	
Supplying water and provision tanks and Manilla ropes to Alguada Reef light-house.	1,597 14 0	
Selecting and measuring rock to be cut down for temporary light-house south of Savage Island light-house.	19 0 0	
Total ...	9,778 13 0	
Repairs.		
Repairs to Alguada Reef light-house	1,603 3 4	
Repairs to Double Island light-house	1,045 11 6	
Repairs to China Buckeer light-house	482 1 0	
Repairs to Cocos Island light-house	348 4 0	
Repairs to Oyster Island light-house	194 12 0	
Repairs to Savage Island light-house	34 0 0	
Repairs to Reef Island light-house	34 0 0	
Total ...	3,741 15 10	
Total Original Works and Repairs ...	13,520 12 10	

Valuation of Light-house Stores received from the Director-General of Stores, London, during the year 1888-89.

Name of steamer imported by.	Name of light-house received on account of.	Names of supplies and description of stores.	Value of each article.	Total of each.	Total cost at Rangoon at 1*s.* 5*d.* exchange.
			£. s. d.	£. s. d.	Rs. A. P.
S. S. *Castledale.*	Savage Island light-house.	50 chimneys at 11*s.* 6*d.* per dozen.	2 7 11		
		44 yards wicks ...	0 17 0		
		Packing	0 12 0		
		Share of freight ...	0 13 6		
				4 10 5	63 13 2
	Oyster Island light-house.	75 chimneys at 7*s.* 6*d.* per dozen.	2 6 10		
		80 yards wicks ...	0 13 6		
		Packing	0 7 0		
		Share of freight ...	0 13 6		
				4 0 10	57 0 11
	Reef Island light-house.	50 chimneys ...	1 11 3		
		20 yards wicks ...	0 9 0		
		Packing...	0 3 3		
		Share of freight ...	0 7 6		
				2 11 0	36 0 0
	Alguada Reef light-house.	2 gross chimneys at 60*s.* per gross.	6 0 0		
		40 gross wicks ...	3 15 0		
		8 sets tube-lifting and wick holders at 2*s.* 6*d.*	1 0 0		
		Packing	1 15 0		
		Share of freight ...	0 19 6		
				13 9 6	190 3 8
		Carried over ...	...	24 11 9	347 1 9

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Valuation of Light-house Stores received from the Director-General of Stores, London, during the year 1888-89—concluded.

Name of steamer imported by.	Name of light-house received on account of.	Names of supplies and description of stores.	Value of each article.	Total of each.	Total cost at Rangoon at 1*s.* 5*d.* exchange.
		Brought forward ...	£. s. d. ...	£. s. d. 24 11 9	Rs. A. P. 347 1 9
S. S. *Castledale*—concluded.	Cocos Island light-house.	50 chimneys ...	7 2 0		
		88 yards wicks ...	2 17 6		
		Packing	2 0 0		
		Share of freight ...	2 2 0		
				14 1 6	198 11 2
	China Buckeer light-house.	75 chimneys at 26*s.* 6*d.* per dozen.	8 5 7		
		88 yards wicks ...	3 2 0		
		Packing	0 15 0		
		Share of freight ...	1 17 6		
				14 0 1	197 11 3
	Double Island light-house.	50 chimneys at 26*s.* 6*d.* per dozen.	5 10 5		
		88 yards of wicks ...	3 2 0		
		Packing	0 15 0		
		Share of freight ...	1 11 6		
				10 18 11	154 8 6
	Light-vessel *Krishna.*	2 gross chimneys at 72*s.* per gross.	7 4 0		
		20 gross wicks ...	3 0 0		
		Packing	2 4 5		
		Share of freight ...	0 19 6		
				13 7 11	189 1 10
S. S. *Miranda.*	Eastern Grove light-house.	50 chimneys at 3*s.* 9*d.* each	9 7 6		
		88 yards of wicks ...	2 9 6		
		Packing	0 18 0		
		Share of freight ...	1 12 3		
				14 7 3	202 12 2
		Total ...	...	91 7 5	1,289 14 8

RANGOON:
The 1st June 1889.

F. WARDEN, CAPTAIN, I.M.,
Superintendent of Light-houses, Burma.

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TWENTY-SECOND ANNUAL

REPORT ON THE LIGHT-HOUSES AND LIGHT-VESSELS OFF THE COAST OF BURMA

FOR

The year 1888-89.

RANGOON:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.

1889.

[Price,—Six annas.]

LIGHT-HOUSES.

False Point—Was thoroughly inspected by the Deputy Conservator in November last, the tower was white-washed inside, and sundry petty repairs done to the buildings and out-houses. A cyclonic storm passed over the station in the middle of September last, but no material injury was done to the buildings. The new sluice referred to in last year's report was completed in April last.

The light was exhibited 4,372 hours—an average of 12 hours per night—1,393¾ gallons of oil were consumed in the exhibition of the light—an average of 51 fluid ounces per hour—13 chimneys were broken, and 57 yards of wicks consumed. The health of the station has been fairly good, fever, &c., prevailing in the months of September, October, and November 1888.

Saugor.—This light-house was visited and inspected by the Deputy Conservator twice during the year. In the first occasion, in April 1888, he was accompanied by Mr. Apjohn, the Superintending Engineer, who examined the buildings and suggested certain repairs, which were eventually carried out in December, January, and February last. In his last visit in February the Deputy Conservator approved of the repairs executed.

The light-house machinery has worked satisfactorily throughout the year, and there is nothing of importance to report upon.

The light was exhibited for a period of 4,330 hours and 33 minutes. The quantity of oil consumed in the exhibition of the light has been 616 gallons, showing an average of 23 fluid ounces per hour. The health of the station has been fairly good on the whole.

Cowcolly.—There is nothing particular to report. The light was exhibited 4,341 hours: 293 gallons of oil were consumed in the exhibition of the light—average 10·8 fluid ounces per hour.

General repairs were commenced in December 1888, and completed in April 1889.

The general health of the station is good.

LIGHT-VESSELS.

The Pilot's Ridge station was taken up by the *Meteor* from 1st April to 31st October 1888, when she relieved the *Canopus* at the Mutlah station on the 1st November 1888, which vessel came to the intermediate station to relieve the *Planet* on the 1st November 1888, where she remained the whole of the month, and was then brought up to Calcutta on the 2nd December 1888, and, after undergoing a thorough repair in the Dockyard, took up her station at the Pilot's Ridge on the 13th March 1889. The *Meteor* remained at the Mutlah station during the year. The *Planet* was towed up to Calcutta, and, requiring very extensive repairs, is still in dock. The Eastern Channel light-vessel *Star* was relieved by the *Luna* on the 31st October 1888, and brought up to Calcutta on the 4th November 1888 for repairs, where she remained up to 31st January 1889, and then took up her duties at the intermediate station from the 1st February 1889.

The quantity of cocoanut oil consumed in exhibiting the outer machine lights during the year has been 1,808 gallons and 352 gallons of mineral oil, and 297 chimneys were broken: 1,702 gallons of cocoanut oil were consumed in the inner light-vessels, and 438 chimneys were broken, showing a total of 3,510 gallons of cocoanut oil and 735 chimneys, in addition to 413 gallons used in all the vessels for lighting and other purposes. The above gives an average of 16·3 fluid ounces for the inner lights and 30 for the outer lights.

The quantity of mineral oil consumed by the new light-ship *Luna* as an outer light has been 352 gallons, showing an average of 28·7 fluid ounces.

The following repairs were done to the light-vessels:—

Star.—Her starboard knight-head hawse timbers and chocks, short top timbers and long top timbers in starboard bow covering boards and timber heads have been renewed, and all defective planks supplied. The top sides and deck have been caulked, and all other necessary works executed.

Canopus.—The mainhold has been cleared out, lifted part of her ceilings, taken out fore and mizzen mast, caulked her decks, her frames have been painted, all the tanks have been scaled, cleaned and painted, and necessary repairs carried out to lantern gear and clock-work.

Planet.—The vessel is still in the hands of Dockyard authorities, undergoing necessary repairs.

Luna.—This new light-vessel came out from England and arrived in Calcutta on the 23rd May 1888, fitted with lamps to burn heavy mineral oil, as reported in last year, and, after undergoing some necessary repairs in the Dockyard, took up her station at the Eastern Channel light on the 1st November 1888.

E. W. PETLEY,
Deputy Conservator.

The 20th June 1889.

W. J.—Reg. No. 3373C—204—16-8-89.

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Annual Report for 1888-89 *on Light Houses in the Bengal Presidency inspected by the Port Officer of Calcutta, including Norman's Point and Kutubdia Light Houses now under the control of the Chittagong Port Trust.*

Pooree.—This light is reported to have burned well during the year, and no complaints regarding it were made by commanders of vessels that visited the Port. The Chance's Petroleum Duplex Light was exhibited from 1st April to 2nd August 1888, when it was taken down for some petty repairs, and the old Port lantern was substituted as a temporary measure. The Petroleum Light was re-exhibited on the 20th August 1888 to the close of the official year under report.

2. The masonry turret on which the Port lantern rests is still in existence, and reported to be in good order.

3. The old Port lantern was sent during the year to the Jobra workshop at Cuttack for repairs, and it has been received back at Pooree thoroughly repaired and painted. It is kept in reserve for use when required.

4. All the light watchers are reported to have worked well during the year except one, who was dismissed on the 17th July 1888 on account of drunkenness and neglect of duty.

5. The following comparative table shows the consumption of oil during the years 1887-88 and 1888-89 :—

	1887-88.				1888-89.			
	Gals.	Q.	P.	G.	Gals.	Q.	P.	G.
Cocoanut oil	60	3	1	1	6	1	1	0
Kerosine oil	33	3	0	0	87	0	0	0
	94	2	1	1	93	1	1	0

It is satisfactory to note that the use of kerosine oil this year has been a success in every way, both for lighting purposes and economy.

6. *Dhamra.*—The new second order Dioptric light on Shortt's Island was exhibited on the 1st of September 1888 in accordance with Notices to Mariners, Nos. 12 and 19, dated the 21st March and 22nd May 1888 respectively. It is visible in clear weather from a distance of 14 nautical miles, and is a guide to vessels making the Dhamra and clearing the dangerous Palmyras Reef, but it is more especially useful to the regular weekly trading passenger steamers. It is reported that the main and subsidiary lights are exhibited punctually every night and are in good order. This light-house has the following establishment as sanctioned by Government. :—

	Rs.	Rs.
1 Light-keeper	120 to	150
1 Assistant light-keeper	70	
4 Light watchers on	8 each	
2 Coolies on	8 ,,	
1 Sweeper on	8 ,,	

The 4 light watchers and 1 coolie get, in addition to their pay, a provision allowance of Rs. 4 each. The oil used is the heavy petroleum specially brought out from England, and which has proved most satisfactory in every way. The expenditure from 1st September 1888 to 31st March 1889 was 548 gallons, 3 quarts and 1 pint.

7. *Balasore.* This light is merely an ordinary mast-head light and is triced up under the top of an old lower mast. The light is in no way equal to the requirements of the port, and the Government have recently sanctioned its being replaced by a sixth order Dioptric light from Messrs. Chance Brothers and to be visible 10 miles.

8. There are two light-keepers attached to this flagstaff, one on Rs. 7 and the other on Rs. 5, and their shed was repaired at a cost of Rs. 30 during the year.

9. The mound on which this flagstaff stands has been badly handled in the recent cyclones, but the Public Works Department have run out groves, and when I visited the place, there is no doubt that much sand had been collected, and it is quite possible that the mound may be saved.

10. The oil expended during the year was 40 gallons, 3 quarts and 1 pint, which is slightly under the quantity used the year previous.

11. *Kutubdia Light-house.*—The Port Officer of Chittagong reports that he frequently visited this light-house during the year. He states that no alteration has been made to the lighting power in the lantern, but that many complaints have been received of the inefficiency of this light.

12. The blue light was exhibited hourly from the 1st of August to the 31st of December as ordered by Government.

13. The revetment has been strengthened by an additional quantity of 600 tons of stone ballast at a cost of Rs. 1,800, and the local Port Officer also remarks that the stone has, in his opinion, been placed at the wrong spot, viz., too far north, and he has noticed that the wooden planking which at present holds the stones up was breaking down opposite the store godown, owing to there being no outside support to the planking to resist the inside pressure from the stone, and that he has given orders to the Light-keeper to have the stones carried from the north end and placed opposite the godown and towards the south end, piling the stone up outside the planking to support the same. He states that the revetment otherwise is in good condition.

14. The Light-house and the dwelling houses of the light-keepers have been repaired by the Public Works Department and are reported to be in good order.

15. The annual consumption of oil was a little over 892 gallons, as against 891 gallons in the previous year.

16. *Norman's Point Light Beacons.*—These beacons are reported to be in fair order, and the Port Officer reports they were frequently visited by himself during the past year. The substitution of kerosine oil lamps for cocoanut oil lights, which were formerly used, has proved a great success both in point of efficiency and economy.

17. I regret exceedingly that the pressure of work has prevented my going personally round the Chittagong lights during the year.

E. W. PETLEY,
Port Officer of Calcutta.

CALCUTTA, PORT OFFICE,
The 20th June 1889.

C. E. G.—Reg. No. 3374C—204—16-8-89.

Local and Municipal Department.

~~3089~~
3091

CHIEF SECRETARIAT. MADRAS.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following paper :—

Letter from the President District Board, Salem dated 30 September 1889 No. 1052 Refer, stating that the sum of Rs 5740 for the Talavasal Bridge may be met from Rs 11500 sanctioned for the special Repair of Salode - Attamancotai road.

Order thereon dated 17 October 1889 No. 2400 2 Mis

The Accountant-General is requested to place the amount referred to at the disposal of the Public Works Department.

(True Extract)

Asst Secretary.

To

The Accountant-General
" Public Works Deptt
" President Distt Board, Salem

Govt. of {188} Madras.

3091

To

Proceedings, dated 188 ,

No.

Subject.

PWCo 10.012

Govt. of {1889} Madras.

Local and Municipal Department.

To

Hon P. W. Deptt

Read 24 10 89.

Proceedings, dated 17th October 1889.
No. 2400 L.M.S.

No 3091 Mad. Nov. 1. 1889

Subject.

Requesting the Accountant General to place at the disposal of the P. W. Deptt Rs 540 for completing the Talavadi Bridge Salem.

SECRETARY TO GOVERNMENT
24 OCT 89
P.W. DEPARTMENT, MADRAS.

B/

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No 3091

PUBLIC WORKS DEPARTMENT.

3091

PROCEEDINGS OF THE MADRAS GOVERNMENT.

November 1. 1889

READ the following

Proceedings of the Local & municipal Dept... No 2400 L.M.S. dt 17th Oct 1889

Communicated to the Superintending Engineer IV Circle, and the Examiner of P.W. accounts with reference to para 3 of G.O. No 2291 W., dated 21 August 1889.

2. The sum of Rs 39,300 provided in the Local Fund budget of the Salem District together with Rs 540 sanctioned in the Proceedings above recorded, will be treated as additions to the current year's Public Works grant under Incorporated Local Funds.

Rec'd 30.10.89

Sent 30.10.89

To
The Sup.g Engr IV Circle.
" Exam. P.W. accounts.

D/II

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Cir

Encl

No 3091 Wat Nov 1. 1859

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