

(1) பத்தங்கரின் எண்ணிக்கை

14 18

(2) புதுக்கித் திருப்பிய நாள்

10.10.1892

(3) ஆதாரம் குறிப்பவர் சுருக்கொப்பம்

87

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

பொதுப்பணித் துறை

அரசாணை எண்.

2730 W.

அச்சகம்

மு. தோப்புத் தாள்-எண்.

பலவகை

நாள் :

25.10.1893.

199

மடிக்கவோ சுண்டபடி கையாளவோ கூடாது.

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4TH AUGUST 1893, No. 2014 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

G.O., dated 18th July 1893, No. 248, Marine.

Read—the following paper:—

From the Presidency Port officer, Madras, dated 13th June 1893, No. 540/196 G., pointing out the urgent necessity for repairing the jetty wall at Negapatam and forwarding the following estimates:—

	rs.
(1) Jetty wall repairs	1,780
(2) Extending certain groynes	520
(3) Constructing others	2,680
Total	4,980

Order—dated 18th July 1893, No. 248, Marine.

The estimates resubmitted by the Presidency Port officer will be approved and transferred to the Public Works Department for immediate execution. The Accountant-General will be requested, in the Financial Department, to place the amount required for carrying out the works together with the establishment charges at the disposal of that department from landing and shipping dues.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

G.O., dated 24th July 1893, No. 703, Financial.

Read—the following paper:—

G.O., dated 18th July 1893, No. 248, Marine.

Order—dated 24th July 1893, No. 703, Financial.

The Accountant-General will be requested to place the sum of Rs. (6,200) six thousand two hundred at the disposal of the Public Works Department from landing and shipping dues.

(True Extract.)

(Signed) J. F. PRICE,
Chief Secretary.

4TH AUGUST 1893, No. 2014 W., PUBLIC WORKS.

ORDER—dated 4th August 1893, No. 2014 W., Public Works.

The undermentioned estimates in connection with the Negapatam harbour are sanctioned for immediate execution:—

Excluded Local.
Miscellaneous Public Improvements.
Repairs.

(1) Repairs to the jetty wall	...	...	Rs. 1,780	No. 20 W. of 1893-94.
(2) Extending and strengthening the present groynes on the east side of the island in the harbour	...	...	520	No. 21 W. of 1893-94.
(3) Constructing two stone groynes on the west side of the island	...	...	2,680	No. 22 W. of 1893-94.

2. The sum of Rs. 6,200, allotted by the Financial Department for carrying out the above works, is distributed as shown below:—

Works	...	...	...	Rs. 4,980
Establishment	...	...	...	1,145
Tools and plant	...	...	...	75
Total	...	...	...	6,200

(True Extract.)

(Signed) J. HANNAN,
Ag. Joint Secy. to Govt., P.W.D.,
General, Buildings and Roads Branch.

To the Superintending Engineer, V Circle, with 19 enclosures.
" Examiner, Public Works Accounts.
" Marine Department.

Exd. A. D. Xavier.
Spare Copies

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1893} Madras.
PUBLIC WORKS.

Dated August, 4th.

Recd.

Encl.

G.O., 4th Aug. 1893, No. 2014 W.

AUGUST.

Negapatam Harbour

Estimates aggregating Rs. 6,200 in connection with the — sanctioned for immediate execution.

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3

22ND SEPTEMBER 1893, Nos. 342, 343, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper:—

From Commander H. A. STREET, R.I.M., Acting Presidency Port Officer, Madras, to the Chief Secretary to Government, dated Madras, 9th September 1893, No. 1639—307 G.

I have the honour to forward herewith the annual report on the lights and light-houses in the Madras Presidency for the official year 1892-93.

ENCLOSURE.

REPORT on the Lights and Light-houses on the Coasts of the Madras Presidency for the official year 1892-93.

NEW LIGHT.

On and from 1st October 1892 a 6th order red dioptric port light was exhibited at Tondi, on the Madras coast, Palks Strait.

SUBSTITUTION OF IMPROVED BURNERS, &c.

A 4-wick Douglass burner with pressure lamp was brought into use at the Muttum and Santopilly light-houses and a 2-wick Douglass burner with reservoirs at the light-houses at Mangalore, Calicut, Cochin, Tuticorin (Hare Island), Pamban, Negapatam, Seven Pagodas, Pulicat, Armeghon, Point Divi and Vakalapudi.

CHANGE OF LIGHT.

A 4th order dioptric light apparatus has been substituted for the 6th order light at Hope Island. To effect this change the old light had to be extinguished on the 15th November 1892, and no light was exhibited from that date until the 1st January 1893 when the new apparatus was brought into use.

A red sector showing in the direction of the Sacramento shoal was fitted to the new lantern on the 1st March 1893, but was removed on the 1st August 1893, having been found defective.

OTHER IMPROVEMENTS.

In addition to annual repairs, &c., the following may be noticed:—

Mangalore.—Construction of quarters for the light-keepers was commenced in February 1893.

Cochin.—A dioptric mirror was supplied and attached to the apparatus.

Cuddalore.—Quarters for the light-keepers were completed.

Point Calimere.—New quarters for the light-keepers were under construction at the close of the year.

Calingapatam.—A new store-room was completed.

LIGHTNING CONDUCTORS.

See remarks in Appendix C.

APPEN

List of Lights on the

Name of light.	Location.	Latitude, N.	Longitude, E.	Number and relative position of lights.	Colour of lights.	Fixed, flashing, in-terminating, alternating or revolving.	Interval of revolution or flash or occultation.
Coondapoor ..	On the beach at the entrance to the river.	13° 38' 20"	74° 39' 40"	1	Red ..	F.	
Malpe	Do. ..	13° 20' 40"	74° 42' 0"	1	White.	F.	
Mangalore ..	On a hill above the town, and near some high trees.	12° 52' 17"	74° 50' 08"	1	Do.	F.	
Cannanore ..	On the fort rampart near the beach.	11° 51' 10"	75° 21' 45"	1	Red ..	F.	
Tellicherry ..	On the fort wall near the beach.	11° 44' 50"	75° 28' 30"	1	White.	F.	
Mahé (French Territory).	On the south side of the entrance to the river, at the foot of the flag-staff.	11° 42' 10"	75° 31' 10"	1	Red ..	F.	
Calicut	On the sandy beach.	11° 15' 05"	75° 45' 35"	1	White.	F.	
Narakel (Cochin Territory).	On the beach at mouth of creek, 5 miles to the northward of Cochin.	10° 03' 0"	76° 12' 0"	1	Do.	F.	
Cochin	On a small mound which formed a bastion of the old fort to the south of the harbour.	9° 57' 47"	76° 13' 45"	1	Do.	F.	
Alleppy or Alipée (Travancore Territory).	On the beach, about one cable inland.	9° 30' 0"	76° 19' 0"	Only one light visible at a time. There are 9 lamps placed in three sets of three, as they revolve each set of three gives one stream of light.	Do.	Rev. ..	A flash every minute.

DIX B.

Coasts of the Madras Presidency.

Miles visible in clear weather.	Arc of illumination. (bearings are magnetic and from seaward).	Nature of construction, colour, or any peculiarity of light-house.	Height in feet of centre of lantern above highest water.	Height in feet of building from base to vane.	Character and order of illuminating apparatus.	Year lighted.	Remarks.	
6 to 8	From N. thro' E. to S., shut in to the westward of N. by trees.	Steel mast	45	40	Dioptric, order, light.	6th Port	1st October 1888; present light 1st Nov. 1891.	Intended as a guide to vessels making the port and is exhibited annually from 1st October to 31st May only.
6 to 8	From N. thro' E. to S., shut in between N. and N.E. by trees, N. 53 E. and N. 57 E. by St. Mary's Islands, N. 73 E. to N. 80 E. by St. Mary's Islands.	Do.	53	50	Do.	Do.	Do.	do.
14	From N. by E. $\frac{1}{2}$ E. thro' E. to S. by W. $\frac{1}{2}$ W.	Small white masonry tower.	240	65	Dioptric, order.	4th	1st October 1842; improved 1870.	As a guide to the anchorage.
6 to 8	Between the bearings of N. W. by W. $\frac{1}{2}$ W. and E. by	Small masonry tower of a light yellow colour.	64	25 from the rampart.	Dioptric, order.	6th	17th Oct. 1843; improved 1870; transferred to tower 1880.	Do. do.
6 to 8	N.W. thro' E. to S.E.	Small masonry tower.	70	25	Do.	Do.	1845; improved 1870; transferred to tower 1881.	Do. do.
7	All round the compass.	Small white pyramid.	52	7	..	..	1885	Shown only during N. E. monsoon.
14	From N. 25 W. thro' E. to S. 14 E.	White column.	102	95	Dioptric, order.	4th	1847; improved 1881.	To guide vessels to the anchorage clear of the reef, which lies about 1 mile S. 30° W. from the light. A small red light is exhibited from the head of the pier as a guide for small coasting craft when entering the roadstead.
10	180° from N.N.W. thro' E. to S.S.E.	Flagstaff	95	102	Country-made lantern.	..	1865	Is exhibited only during the S.W. monsoon, viz., from 15th May to 30th September, when Cochin port is avoided by shipping.
15	From N. by W. $\frac{1}{2}$ W. thro' E. to S. by E.	White laterite column.	100	91	Catadioptric, 4th order.	1st April	1839; improved 1868.	..
17	All round the compass.	Masonry round white tower.	113	115	Catadioptric, 1st order (Hologophotal).	..	1862	To guide vessels to the smooth water anchorage during the S. W. monsoon.

List of Lights on the

Name of light.	Location.	Latitude, N.	Longitude, E.	Number and relative position of lights.	Colour of lights.	Fixed, flashing, intermittent, alternating or revolving.	Interval of revolution or dash or occultation.
Muttam	On a rocky promontory 300 yards from sea, known as Muttam Point.	8° 07' 30"	77° 15' 10"	1	White.	F.	
Gulf of Mannar	Munapad ... On the Tinnevely Coast.	8 22 30	78 6 30	1	Red ..	F.	
	Tuticorin ... On the north extreme of Hare Island or Paundian-tivo, 2½ miles east of Tuticorin town.	8 47 10	78 11 20	1	White.	F.	
	Paimben or Pamban Pass. On a sand hill about one mile east of northern channel.	9 17 14	79 12 53	1	Do.	F.	
Tondi	About 14 yards due south of the Tondi Sea Custom House.	9 44 45	79 00 30	1	Red ..	F.	
Point Calimera.	On the point about 3½ miles south of Negapatam.	10 18 0	79 51 30	1	Do.	F.	
Negapatam	On the jetty near to the river mouth.	10 45 30	79 50 20	1	White.	F.	
Karikal (French Territory).	At the mouth of the Arsalas river.	10 55 0	79 50 35	1	Do.	F.	
Guddalore	On cross trees of flagstaff.	11 43 0	79 46 15	1	Red ..	F.	
Pondicherry (French Territory).	In square near the beach.	11 55 25	79 49 35	1	White.	F.	
Do.	End of landing stage.	..	..	1	Red ..	F.	
Seven Pagodas or Mahabalipuram.	On a rock half a mile inland marked on chart "Ruined Pagoda". On rock very conspicuous and about 5 miles northward of Sadras.	12 26 55	80 11 31	1	Do.	F.	
Madras or Fort St. George.	On the Esplanade, north of the Fort.	13 05 11	80 16 51	1	White.	Flash- ing. The motion is reciprocating and not rotatory.	There are 5 faces, and every minute one face flashes towards the same spot, but three faces are presented seaward at one time. The duration of the flashes to that of the eclipses or dark periods is in the ratio of 2 to 3, but as the

nature of the motion is reciprocating instead of rotatory, the above ratio merely expresses the average proportion of the light and dark intervals, which are themselves variable according to the position of the spectator. The rapidity of movement is so adjusted that the duration of the flashes will vary from 0° to 48° and that of the eclipses from 0° to 72°, the sums of the duration of light and darkness bearing, however, in every position the constant ratio of 2 to 3.

Coasts of the Madras Presidency—cont.

Miles visible in clear weather.	Arc of illumination. (Bearings are magnetic and from seaward).	Nature of construction, colour, or any peculiarity of light-house.	Height in feet of centre of lantern above highest water.	Height in feet of building from base to vane.	Character and order of illuminating apparatus.	Year lighted.	Remarks.
16	From N. 65 W. thro' N. to S. 85 E.	Dark grey granite column, showing black and white horizontal stripes from seaward.	142	72	Dioptric, order.	1st 1876; altered 1st January 1883; improved 1893.	This light, in the territory of Travancore, is intended to mark the vicinity of the Crocodile Rock, which lies 3 miles S.W. & S. of Cadiapattam. Vessels, unless bound to Kolachel or Cadiapattam, should not pass inshore of Kota and Adunda Islands, as they are difficult to be distinguished from seaward, and sometimes have the appearance of sunken rocks from the sea sweeping completely over them.
12	N.N.E. thro' E. to S.S.W.	White masonry tower.	104	27	Dioptric, order, light.	4th Port June 1838; improved 1st May 1890.	Is intended to warn vessels of the dangerous shoal in the vicinity.
14	All round the compass.	Sandstone column coloured brown, lantern white.	85	91	Dioptric, order.	4th 16th May 1845; improved 1874.	As a guide for vessels to the anchorage.
14	Do.	Circular masonry column.	97	72	Catadioptric, 4th order.	21st April 1846; improved 1860.	As a guide to vessels making for the Pamban channel.
10	Visible from all directions seaward.	Steel mast ..	63	52	Dioptric, order, light.	6th Port 1st Oct. 1892.	As a guide to vessels making the port.
6	All round the compass.	Steel mast, painted white.	49	..	Dioptric, order, light.	6th Port 1st June 1890.	As a guide to vessels passing between Point Calimere and the shoals to the eastward.
14	From N. 5 W. thro' W. to S. S.E.	Masonry column painted white.	79	83	Dioptric, order.	4th 1st August 1846; improved 1870.	As a guide for vessels to the anchorage.
9	Visible from all directions seaward.	Do.	42	..	Lamp burning coconut oil.	1853 ..	Do. do.
6 to 8	N. thro' W. to S.	Flagstaff ..	130	31	Dioptric, order, light.	6th Port 1st July 1889; present light, 5th October 1891.	Do. do.
14	Visible from all directions seaward.	Masonry column, painted light yellow.	89	76	Dioptric, order.	4th 1886 ..	Do. do.
4	Do.	Do.	31	..	..	1881 ..	When surf is heavy and approach to landing prohibited, a fixed green light is shown.
17	From N. thro' W. to south (180°).	Small grey turret.	119	26	Dioptric, order.	4th 10th July 1887.	Is intended to warn mariners of the dangerous outlying patches of rock composing the Tripatore reef and other reported dangers in its vicinity, to avoid which vessels navigating between Sadras and Covelong should not come into a less depth than 13 fathoms.
20	From N.N.E. thro' W. to S. S.E.	Granite column.	128	126	Catadioptric ..	1st Jan. 1844.	To guide vessels clear of the Pulicat shoal. Mariners should not bring this light to southward of S.S.W. & W. to avoid Pulicat shoal.

List of Lights on the

Name of light.	Location.	Latitude, N.	Longitude, E.	Number and relative position of lights.	Colour of lights.	Fixed, flashing, intermittent, alternating, or revolving.	Interval of revolution or flash or occultation.
Madras Leading Light.	Madras Pier T. Head.	13° 05' 44"	80° 17' 18"	1	Red ..	F.	
Do.	Port Office Terrace.	13 05 47	80 17 05	1	Green..	F.	
Pulicat ..	Near the Beach ..	13 25 15	80 19 06	1	White.	F.	
Arneghon or Arneghon.	On the mainland, village of Moona or Moonapellium.	13 53 08	80 11 47	1	Do.	Rev.	A flash every 20 seconds.
Point Divi or Divy.	About 2 miles north-west of the Point.	15 58 55	81 09 25	1	Do.	F.	
Masulipatam ..	In the Fort ..	16 09 15	81 09 25	1	Do.	F.	
Coringa or Hope Island.	On the southern part of Hope Island, Coringa Harbour, and distant about 2½ miles from the sea.	16 49 05	82 18 58	1	Do.	F.	
Cocanada or Valsapudi.	½ mile north of Cocanada river and about 500 yards from the shore.	17 00 40	82 16 30	1	Do.	F.	A flash every 30 seconds.
Cocanada River.	One on the end of the North Groyne and the other on the end of the South Groyne entrance to the river.	..	..	2	Red ..	F.	
Santipilly ..	On a small detached hill some distance in land; this distance said to be ½ mile.	18 04 50	83 37 35	1	White.	F.	
Calingapatam ..	On the point ..	18 19 0	84 07 30	1	Red ..	..	
Gopalpur ..	On the mainland 60 yards from low-water mark.	19 13 0	84 52 0	1	White.	F.	
Do.	On the extreme end of the pier head, port of Gopalpur.	..	..	1	Red ..	..	

Coasts of the Madras Presidency—cont.

Miles visible in clear weather.	Arc of illumination. (Bearings are magnetic and from seaward.)	Nature of construction, colour or any peculiarity of light-house.	Height in feet of centre of lantern above high water.	Height in feet of building from base to vane.	Character and order of illuminating apparatus.	Year lighted.	Remarks.
5	From S. 51° 45' W. thro' W. to N. 17° W.	Wooden post ..	30	..	Ship's side light, dioptric.	15th Oct. 1888.	To guide vessels leaving the harbour or making the anchorage at night.
5	From S. 51° 45' W. thro' W. to N. 17° W.	Do. ..	60	..	Do. ..	Do. ..	Do. do.
14	From N. by W. thro' W. to S. by E.	Masonry column with black bands.	88	57	Dioptric, order.	4th 1859; improved 1870; altered 1881.	To guide vessels clear of the Pulicat shoal. When the light bears W. ½ N., a vessel is to the northward of all dangers.
14	From N.E. thro' W. to S.E.	White masonry column.	107	111	Do. ..	1st January 1853; improved 1870; present light 1881.	Warns vessels off the Arneghon shoal, the shallowest part of which (1½ fathoms) lies 6 miles off shore.
14	From N.E. thro' W. to S.	Do. ..	48	50	Do. ..	1st May 1851; improved 1870.	Is intended to point out the position of the dangerous sands in the vicinity.
6	From S. 26° W. thro' W. to N. 9° E.	Flagstaff ..	60	112	Dioptric, order.	6th 1855; improved 1870.	As a guide for vessels to the anchorage.
15	From N. 5° E. thro' W. to S. 5° W. +	Masonry tower, horizontal alternate bands of black and white.	83	94	Dioptric, order.	4th 1817; improved 1886; improved 1893.	Is intended to lead vessels clear of shoals off Godavari Point.
14	All round the compass.	White column..	80	76	Do. ..	15th Jan. 1872.	This light is intended to lead vessels clear of the shoals to the northward of Point Godavari when coming into the Cocanada anchorage from the southward and eastward.
2½	Do. ..	Wooden post ..	10	..	..	15th Sept. 1886.	Exhibited to serve as a guide to boats entering or leaving Cocanada river.
16	From N.E. thro' W. to S.W.	On a small basement on the top of a small hill with a small building by the side of the lantern on the west side.	163.77	31.15	Dioptric, order.	2nd 1st Nov. 1849; improved 1871; present light 1886; improved 18th Aug. 1888; improved 1892.	Exhibited to warn mariners of the Santipilly Rocks from which this light bears N. W. ½ W., distant 6½ miles.
12	Do. ..	Obelisk of cut stone; column white; capital dark blue.	76	73	Dioptric, order, light.	4th 15th Dec. 1876; improved 1st June 1890.	Intended to warn vessels off a small reef which projects from the point and which should not be passed in less than 5 fathoms when making the port at night.
12	From N.E. thro' N.W. to S.W.	Flagstaff, painted white.	64	33	Do. ..	Present light 1871; 1st March 1892.	As a guide to the anchorage.
3	All round the compass.	..	25	..	Country lantern.	1st April 1887.	Points out the sea end of the pier.

APPENDIX C.

STATEMENT furnishing (1) particulars of inspection made of Light-houses on the Madras Coast in 1892-93, and (2) remarks in connection with the lightning conductors.

(1)		(2)	
Name of Light.	Designation of officer by whom inspection was made.	Number of inspections made.	Remarks in connection with lightning conductors.
Comdappoor	Port Officer, Mangalore	2	Lightning conductor not tested. A proposal to connect the wire of the lightning conductor with the backwater was sanctioned.
Malpe	Do.	2	
Mangalore	Executive Engineer	1	
Tellicherry	Port Officer, Calicut	1	Lightning conductor in apparent good condition, but not tested in the year.
Calicut	Executive Engineer	1	
Cochin	Superintending Engineer	See foot-note.	
Muttum	Port Officer, Tuticorin	1	Lightning conductor in good order.
	Presidency Port Officer	3	
	Executive Engineer, Tinnevely Division.	1	
Manapad	Port Officer, Tuticorin	2	New lightning conductor completed and tested by Department of Public Works.
	Sub-divisional Officer, Public Works Department.	1	
Tuticorin (Hare Island).	Presidency Port Officer	1	
Pamban	Superintending Engineer	1	Lightning conductor in apparent good order, but not tested in the year.
	Executive Engineer	1	
	Port Officer, Pamban	1	
Point Calimere	Port Officer, Negapatam	12	Lightning conductor tested in February 1892 by Public Works Department and certain suggestions were under consideration by that department for improving its efficiency.
Negapatam	Presidency Port Officer	3	
	Superintending Engineer, V Circle.	1	
Cuddalore	Executive Engineer, Negapatam Division.	4	Lightning conductor in good order.
	Presidency Port Officer	2	
	Personal Assistant to the Presidency Port Officer.	3	
Seven Pagodas	Superintending Engineer	1	Lightning conductor in good order, but not tested in 1892-93.
	Executive Engineer	1	
	Presidency Port Officer	1	
Policat	Personal Assistant to the Presidency Port Officer.	1	Lightning conductor in good condition.
	Reserve Port Officer	1	
	Reserve Port Officer	1	
Armeghon	Assistant Engineer	2	Lighting conductor not tested since 1887.
Point Divi	Port Officer, Masulipatam	11	
	Sub-divisional Officer, Public Works Department.	1	
Vakalapudi	Port Officer, Cocanada	11	Lightning conductor tested by Public Works Department in August 1892 and improvements effected to the joints of the copper rod.
	Superintending Engineer	1	
Hope Island	Port Officer, Cocanada	11	Lightning conductor tested by Public Works Department in August 1892 and found to be in working order.
	Superintending Engineer	1	
	Executive Engineer	1	
Santopilly	Presidency Port Officer	1	Lightning conductor in working order. Extra lightning conductor put up in April 1892 not yet tested.
	Port Officer, Bimlipatam	1	
	Executive Engineer	7	
Calingapatam	Superintending Engineer	1	Lightning conductor in good working order.
	Port Officer, Gopalpur	2	
	Superintending Engineer	1	
Gopalpur	Port Officer, Gopalpur	1	

Note. - At stations where there is a Port Officer or Conservator, such officers, in their capacity as *ex-officio* Superintendents, frequently inspected the lights during the year in addition to the outside inspections above recorded.

APPENDIX D.
STATEMENT showing the sanctioned establishments of Light-houses on the Madras Coast as they stood on 31st March 1893.

Lighthouses.	Amalgamated establishments.					Light-keepers and Signaller.					Total staff.				
	Head Light-keeper and Head Signaller.					Light-keeper and Signaller.					Total staff.				
	Rupees 20.	Rupees 16.	Rupees 12.	Rupees 11.	Rupees 10.	Rupees 9.	Rupees 8.	Rupees 7.	Rupees 6.	Rupees 5.	Rupees 4.	Rupees 3.	Rupees 2.	Rupees 1.	Rupees 0.
Superintendents.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.
Head Light-keepers.	Rupees 100.	Rupees 70.	Rupees 50.	Rupees 10.	Rupees 12.	Rupees 10.	Rupees 9.	Rupees 8.	Rupees 7.	Rupees 6.	Rupees 5.	Rupees 4.	Rupees 3.	Rupees 2.	Rupees 1.
Light-keepers.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.
Remarks.															
Comdappoor															
Malpe															
Mangalore															
Tellicherry															
Calicut															
Cochin															
Muttum															
Manapad															
Tuticorin (Hare Island)															
Pamban															
Point Calimere															
Negapatam															
Cuddalore															
Seven Pagodas															
Madras															
Policat															
Armeghon															
Point Divi															
Masulipatam															
Hope Island															
Vakalapudi															
Santopilly															
Calingapatam															
Gopalpur															

Temporary. - Light-house Mechanic Rs. 80 per month, rising by annual increments of Rs. 5 to Rs. 100.

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22ND SEPTEMBER 1893, Nos. 342, 343, MARINE.

ORDER—dated 22nd September 1893, No. 342, Marine.

Recorded.

(True Extract.)

To the Presidency Port Officer.
„ Public Works Department. ✓

Memorandum
Under Secy PWD
J. F. Price Chief Secretary.

ENDORSEMENT—dated 22nd September 1893, No. 343, Marine.

Five copies forwarded to the Government of India, Department of Finance and Commerce.

J. F. PRICE,
Chief Secretary.

Govt. of {1893} Madras.

MARINE.

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10/2/30 Waj 25 October 1893

Communication to
officers concerned
for information.

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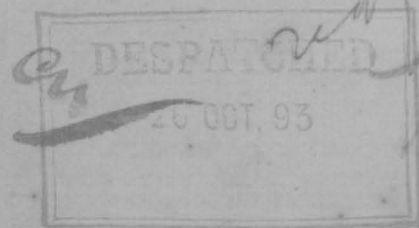
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G.O., &c., 22nd September 1893,
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SEPTEMBER.

Lights and Light-houses.

Recording the report on — in the Madras Presidency for the year 1892-93, and forwarding copies to certain Governments.



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CA to Govt.