

773

Govt. of Madras.

~~PUBLIC WORKS.~~

marine

Dated

Recd.

Encl.

G.O., 17/7/1896, No. 506 Mar

Lighthouse Construction.

=
Certain papers relating
to —, recorded pending
the submission of the
detailed proposals pro-
vided by Mr. Ashpitel.

==

20/7 20/7

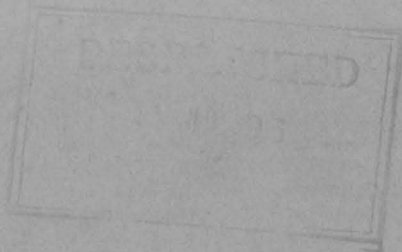
Mr. Ashpitel in his
 letter of the 15th July 1896,
 the papers read above
 will be recorded pending
 the submission of the
 detailed proposals promised.

14/7/96

M

J. W. Ashpitel Esq
 The Pres. Post Office

Marine	W
381 Mar. 8 28-5-96.	674 289 7-96.
376 Mar. 8 27-5-96.	1550 C. 8 19-3-96.
301 Mar. 8 4-5-96.	1084 C. 8 25-2-96.
219 E. 8 23-4-96.	1069 C. 8 24-2-96.
245-46 Mar. 8 8-4-96.	645 W. 8 21-2-96.
183 E. 8 31-3-96.	303 W. 8 24-1-96.
204 Mar. 8 24-3-96.	4132 C. 8 21-12-95
165 E. 8 20-3-96.	2724 W. 8 29-10-95
261 Mar. 8 24-8-95	3085 C. 8 24-10-95
238 " 8 7-8-95	2712 C. 8 9-9-95
216 " 8 18-7-95	2681 C. 8 5-9-95
183 " 8 24-6-95	1824 W. 8 24-7-95
318 " 8 10-8-94.	1809 W. 8 23-7-95
266 " 8 5-7-94.	1706 W. 8 11-7-95
Rm. 189 " 931-10-93	1652 W. 8 6-7-95
183 Mar. 8 5-6-93	1222 W. 8 22-5-95
286 " 8 5-8-92	1049 W. 8 4-5-95
186-7 " 8 3-6-92	700 W. 8 22-3-95
Rm. 79 " 8 9-4-92	686 W. 8 22-3-95
" 264 " 8 2-12-91.	538 W. 8 7-3-95
480 " 8 28-10-91.	2257 W. 8 7-9-94
196 " 8 12-5-91.	1847 W. 8 24-7-94
252 " 8 8-7-90.	259260 W. 8 30-1-94.
	2268 W. 8 4-9-93.
	2001 W. 8 13-7-92
	1189 W. 8 9-4-92
	3003 W. 8 11-11-91.
	4512 C. 8 15-10-91
	2456 W. 8 14-9-91.
	1906 W. 8 10-7-91
	4662 W. 8 29-6-91.
	1523 W. 8 3-6-91.
	1226 W. 8 2-5-91
	107 W. 8 13-4-91.
	1026 W. 8 13-4-91.
	548 W. 8 26-2-91.
	314 W. 8 3-2-91.
	2489 W. 8 17-9-90.



PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Letter from the Chief Architect (H.E. No. 4685 d/2nd Feb 1896)

do do (" " 4986 d/10 March ")

do do (" " 432 d/28th April ")

do do (" " 666 d/11 May ")

do S.E. II Circle (" " 405 K.E. d/15th " ")

do J.W. Ashpitel Esq.,
Ex. Eng., P.W. Dept (" " 2081 d/26 June ")

do do (" " 2082 d/26 " ")

From the Presidency Port Officer (" " 1271 d/25th July 30th " ")

Endowment in the P.W. Dept
on acct of the Supt. Engineer IV

Circle No. 308 d/29 June 1896. (" " 674 d/9 July ")

Letter from J.W. Ashpitel Esq. (" " d/15th " ")

No. 506 d/17

Under the
stances explained

1896

Marine Department.

From

J.W. Ashpitel Esquire
Ex. Engineer.

Dated 15.7.96

Received 15.7.96

Subject
Lighthouse Construction

Returning the papers relating
to — & stating that as the
Presy Port Officer has agreed
to the scheme recently sanctioned,
no further action is necessary
& that detailed proposals and
estimates will be submitted
in due course

Letter Secretary to Government
Marine Department

Sir

I have the honour to return
herewith the accompanying
papers relating to lighthouse
construction & to request that,
as Captain Street ^{with certain} ~~has~~ ^{modifications} agreed
to the scheme for lighthouse
improvements recently sanctioned,
there is no need for further action.
(2) detailed proposals & estimates
will be submitted in due course

I have etc

Yours faithfully

Lt Engineer

1977/96

The Marine Dept. (L. 1000)

15/7/96

Register to return 15/7/96

Government of Madras.

1896

P. W. DEPARTMENT.

CURRENT No.

From

The Surg. Engineer

IV circle

No. 308 W

Dated 29.6.96

Received

ENCLOS.

SUBJECT.

Lighthouses at Cannanore

and Tellicherry: Forwarding

with remarks tracing of
the _____

1847 W d/ 24.7.94

2268 W d/ 4.9.93

259-606 d/ 30.1.94

Marine 402456 d/ 8.4.96

CURRENT No. 5968

DISPOSAL.

Subd. (2) (Lang.)
Ans: 20-7-96

No.

dated

E. C. No. 756

(37)

No. 674289 d/ 4.10.96

Referred to the
Marine Department

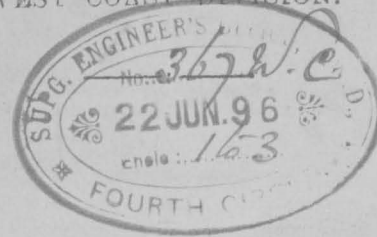
8/7/96
W

on

Arrive the issue of
orders defining the
duties of functions
11/7/96
En

125234

P. W. D.
WEST COAST DIVISION.



FROM

THE EXECUTIVE ENGINEER,
WEST COAST DIVISION,

TO

THE SUPERINTENDING ENGINEER,
FOURTH CIRCLE,
COLMBATORE.

Dated

Despatched

18th June 1896.

No. 29482

ENCLOSURE. 3

SUBJECT.

Lights. Forward
tracings of the lanterns
& Lellicherry

P. W. CURRENT

Current

5768

Mar 27/96

Encls 3 (Plans)

Dec 2-7-96

Dec 13

308 d/29-6-96

Forwarded to
the Chief Engineer and
with tracings of the
light tower in
question, I can
fully endorse the
remarks regarding
Lellicherry light.
The Commander of
the SS Culua (which
conveyed me to Mangalore)
could not determine
which was the Port light.

J. C. Lawrence

SE (10)

29/6

Encls. 3.

2. Tracings.

1 Copy of Port Officer's letter

92 11 d/5-6-96

No 29482

Executive Engineer's Office

WEST COAST DIVISION.

CALCUT, 18th June 1896.

FROM

G. P. Charles Esq.

EXECUTIVE ENGINEER,

WEST COAST DIVISION,

TO

THE SUPERINTENDING ENGINEER,

FOURTH CIRCLE,

COIMBATORE.

ENCLOSURE. 3

Sir,

2 Tracings

1 Copy of Port

Officers letter

no 11 d/s/6/96

3

I have the honor to forward herewith tracings of the Lannanore and Tellikeray lights, as requested in your endorsement No. 202 d.c., dated 15th May 1896, on the Presidency Port Officer's letter No. 1271 P.M. dated 24th April 1896.

It was evident from an inspection of the building that the Tellikeray light could not be lowered, in fact, that it should be raised, and I accordingly wrote to the Port Officer asking him for his opinion as to providing a lamp room as well as to ^{the} other alterations. His reply is herewith enclosed, and

effectually disposes with the proposed
lowering (See also G. O. No. 2368 N, dated 4th
September 1893).

Bannanore is a similar light as regards
power, &c. but the lamp room is situated
below the light in the tower, which, if altered
another room for the storage of oil will
have to be built.

I have the honor to be
Sir
your most obedient servant

Executive Engineer
M. C. A.

Port Office
Tellicherry 5 June 1896.

From

Lieut. H. J. Brown, R. N. R.,

Port Officer,

Tellicherry.

The Executive Engineer,

West Coast Division,

Calcutta.

Sir,

In answer to your L. A. dated 4th June 1896,
regarding the light houses at Bannanore and Tellicherry,
I have the honor to state that in my opinion the
lowering apparatus into a lamp room is not necessary
and a needless expenditure would be incurred. The
existing arrangements are all that is necessary with
lights of this description and no inconvenience has been
experienced hitherto. With regard to the shortening
of the Tellicherry tower I should say the fact of doing
so would render the light absolutely useless. The light
is a most insignificant one and its only redeeming
point is that it is higher than all the other lights
round about it in the town and this is the only
way by which the light can be distinguished as
every shipmaster who has ever visited the port will
testify to. Again if the tower were shortened all
the trees in the Church compounds immediately

vide p. 31 of 880
M. C. A.
11 June 96

It is, I must
certainly - it is
impossible to
distinguish it
from the
Lower Lights

in front of it would have to be destroyed and the
belfrays of both the Protestant and Roman Catholic
churches would have to be fore shortened.

If however Mr Asphitels' suggestion is
adhered to, I would propose that the light be
changed to a green one as otherwise it would be
absolutely impossible to distinguish it from any
of the lamps round about it in the houses and
streets and I am not at all exaggerating facts
in making this statement. It should, I think, be
remembered that this is only a port and anchoring
light and therefore the fact that the height of the
tower tends to diminish the power of the light
is not of any great importance practically
although it is no doubt wrong theoretically.

Whether the tower is shortened or not
I still think that it would be a good thing to
make it a green light and I have consulted
many of the masters of the Coasting Steamers
who are unanimously in favour of such a
change.

If the tower was interfered with at
all, I should say the tower should be
raised 15 feet higher as was proposed
in 1894 see G. O. Financial No 1 dated
4th January 1894.

I have &c.

Sr. H. S. Brown

Lieut. R. N. R.

Port Officer

(True Copy)

Executive Engineer

H. S.

P. W. D.

WEST COAST DIVISION.



FROM

THE EXECUTIVE ENGINEER,

WEST COAST DIVISION,

TO

THE SUPERINTENDING ENGINEER,

FOURTH CIRCLE,

COIMBATORE.

Dated

18th

Despatched

June 1896.

No. 29482

ENCLOSURE. 3

SUBJECT.

Lights. Harman
Tracings of the Harman
& Tellicherry

P. W. CURRENT

Enc 1

5768

has enc 756/96

Enc 53 (Plans)

Dec. 2-7-96

Area 13

308 d/29-6-96

Forwarded to
the Chief Engineer
with tracings of the
light tower in
question, I can
fully endorse the
remarks regarding
Tellicherry light.
The Commander of
the S.S. Culca (which
carried me to Mangalore)
could not determine
which was the light.

J. C. Harman

SE (14)

29/6

Enclos. 3.

2. Tracings.

1 Copy of Port Officer's Letter

70th 11 d/5-6-96

Marine (1896)

DEPARTMENT.

From

THE PRESIDENCY PORT OFFICER,

Madras,

To

THE SECRETARY TO GOVERNMENT,

PUBLIC WORKS (MARINE) DEPARTMENT,

Madras.

No. 1271
225-4

Dated 30

Received

June

1896.

No.

Subject.

Informing that the decision
contained in para 3 of
G.O. quoted affects the
recommendation made by
Mr. Ashpitel regarding
the Light and Light Tower
at Tellicherry.

Heading.

Lighthouses.

No. 1271/2254.

Presidency Port Office,
Madras, 30 June, 1896.

From

Commander H. A. Street, R.I.M.,
Presidency Port Officer,
Madras.

To

The Secretary to Government,
Marine Department,
Chepak.

Sir,

The decision contained in para 3 of G.O. No. 301, Marine, dated 4th May 1896, affects the recommendation made by Mr. Ashpitel regarding the Light & Light-Tower at Tellicherri—see page 31 of G.O. Marine, No. 245 of 8th April 1896, under heading "Tellicherri"—and, as in my opinion a more powerful apparatus is necessary, I submit that the change in the height of the Tower as recommended by Mr. Ashpitel in the Order above quoted should stand over, pending a decision as to the most suitable Light Apparatus to take the place of the one now in use.

I have the honour to be,

Sir,

Your Obedient Servant,

H. A. Street

Commr.: R.I.M.,
Presidency Port Officer.



N^o 1271
1011 P.W.

Presidency Port Office,
Madrass 8th June 1896.

To

F. W. Ashpitel Esq^r,

Chief Engineer,

Coatacamund.

Sir, With reference to the proposals contained in your recent report to Government in connection with the flagstaff light at Gopalpur, I forward for favor of your opinion in the matter a sketch furnished by the Assistant Engineer, Ganjam Division for placing the light in question on the Custom House.

2. The local Port Officer thinks it would be better to build the covering over the light and thus do away with the necessity of sliding the light in and out as would have to be done according to the present plan.

I have the honor to be,

Sir,
Your Obedient Servant,

H. A. Street
Commander R. I. M.
Presidency Port Officer.

N^o 2082

Executive Engineer's Office
Coimbatore 26th June 1896

From

F. W. Ashpitel Esq

Executive Engineer

Coimbatore Division

To

The Secretary to Government
Marine Department

Sir,

I have the honor to forward herewith letter N^o 1271/1011 P.W. dated 8th June 1896 and to request instructions. The alterations to the Gopalpur light sketched by the Assistant Engineer appear to me to be absolutely inevitable as the building is evidently not suited for the installation of any light. Apart from the consideration that the roof was never designed to carry a heavy additional weight the danger from fire would be very

Considerable

considerable and the arrangements,
generally, most inconvenient.

2 I was under the impression
that the Customs House at Gopalpur
had a terrace roof which could
easily be adapted to carry the
light apparatus and if this is not
the case other arrangements could
be made without much expense.

3 I refer this question to you
as I do not know what my duties
are and as the sanctioned scheme
of light house improvements is to
be carried out shortly, I would
suggest that it is not advisable
to carry out details without reference
to the complete scheme.

I have the honor to be
Sir

Your most obed^t. servant

W. W. W. W.
Executive Engineer

728
22-7-96

From
F.W. Ashpitel Esq
Executive Engineer
Coimbatore Division

Dated 26th
Despd 26th
Received } June 1896

No 2082

Encl 2.

Flagstaff light at
Gopalpur.

Requests instructions
in regard to improvements
to the —

Being forward on
the 5th Inst. with C/O
729 and other Marine papers
lying over

1/7/96
m

22-7-96

22-7-96

Executive Engineer's office
Coimbatore 26th June 1896

No 2081
From

F.W. Ashpitel Esq
Executive Engineer
Coimbatore Division

To
The Chief Secretary
to Government, Marine Department
Madras

Sir,

I have the honor to inform
you that the Superintending Engineer
6th Circle has requested me to make
suggestions for the design of improve-
ments to Pamban light house in
accordance with the order conveyed
in G.O. No 1506 W dated 15th May 1896
but I have deferred replying to his
letter, as I believe that additional
orders on the subject will issue
shortly.

P-376 mar
27-7-96

Vide page
34 of G.O. 245
Marine 18-4-96

2
In appendix B of my report
printed

printed with G. O. No 245 Marine dated 8th April 1896, I remarked that "a lantern will be available from one of the lights proposed to be abandoned and when it is fixed, the whole of the lighthouse and its buildings require to be thoroughly overhauled". Until it is decided what lantern is to be fixed at Pamban the preparation of plans and estimates seems inadvisable and I would also suggest that it is not advisable to carry out details of the proposed scheme of light house improvements without reference to that scheme as a whole. Pamban light has been in its present state for some years and it will not matter leaving it for a few months more in its present state ^{until} as the proposed improvements will not materially enhance its value to mariners.

I have the honor to be

Sir
Your most obed^t servant

W. W. P. S.
Executive Engineer

(17)

Recd: 18.5.96

From

The Supg Engineer
Second Circle

To the Chief Engineer
P.W. Department

Dated 15 May 1896

No. 405 NE

Light house & subsidiary
buildings at False Point
Divi -

Requesting to be supplied
with working drawings of
1570 W of 22.5.96
245-6 Marine of 8.4.96.

See over pending
disposal of Mr. Ashpitel's
scheme of establishment
4/6/96
W

102/132

729
Recd 1-7-96

From
F.W. Ashpitel Esq
Executive Engineer
Bombay Division

Dated 26th
Despd 26th } June 1896
Received }

No 2081

Pamban Light House
Suggestions for the
design of improvements
to the -

CPW
29-6-96

102/31

Should take precedence of the pre-
paration of the drawings for the
construction.

3. As regards the proposed new light-
house at Seven Pagodas, I have
on a reference made by the Supg
Engineer, I Culo, informed him
that I think it would be most
advisable for the work to be
undertaken in the I Culo for
as observed by him, the Cooram
Improvements Scheme will throw
much work on the Buckingham
Canal &c.

I have the honour to be,

Sir,

Yours most-obt. Servt.

W. C. Baddley Major R.E.

Supg Engr: I Culo.

L.S.
14/96.

No. 405 N.E. Supg. Engineer's Office,
2nd Class. Berwada.
15 May 1896.

Recd 5

From

Major W. L. C. Baddley R.E.
Superintending Engineer
2nd Class.

To

The Chief Engineer
P. W. Department
Madras.

Sir,

In reference to paras 8 (m)
and 21 of G. O. 245 (Marine) of 1896
I have the honour to request that
I may be supplied with working
drawings for the proposed light house
and subsidiary buildings at Talce
point. Dir.

2. A site plan on a large scale
will also be required, with the
exact position of the light house
marked by bearings when the
Presidency Port Officer has definitely
decided the question; which apparently

Shall

P. W. CURR NO. 4420

Recd: 13-5-96

From

THE CONSULTING ARCHITECT

TO THE GOVERNMENT OF MADRAS,

To

THE Chief Engineer
P. W. D.

No. 666

Dated

Despatched

Received

11"

May 1896.

No. of ENCLOSURES.

Subject.

Reporting that an Estimate
amounting to Rs 10139 for dis-
mantling the old light house
column at Madras was sub-
mitted on the 20 March/96

No. 666

Recd 4
Office of the Consulting Architect to Govt.,
Chepauk, Madras,
11th May 1896.

From

Henry Irwin, Esq., C.I.C.,

The Consulting Architect

to the Government of Madras,

To

The Chief Engineer

Public Works Department.

Sir,

With reference to your reminder No. 303 dated the 6th Instant, I have the honour to report that an estimate amounting to Rs 10,139 for dismantling the old light house Column at Madras was submitted to you with this office letter No. 4685 dated 2nd March 1896

Enclosures.

I have the honour to be,
Sir,

Your most obedient Servant,

Aslam

9.5.96 Lt. Colonel R. R.
In Charge Consulting Architect to Govt. D.

(9)

Recd: 29.4.96

From

THE CONSULTING ARCHITECT

TO THE GOVERNMENT OF MADRAS,

To

THE Chief Engineer
P. W. D.

No. 432

Dated

28th

Despatched

Received

April 1896.

No. of ENCLOSURES.

Subject.

Reporting that the old Light house Column at Madras is built of brick faced with stone.

No. 432

Office of the Consulting Architect to Govt.,
Chepauk, Madras,
28th April 1896.

From

Henry Irwin, Esq., C.I.C.,

The Consulting Architect

to the Government of Madras,

To

The Chief Engineer

Public Works Department

Sir,

In reply to your Memo. No. 219 & dated
the 23rd Inst. I have the honour to report
that the old Light-house Column at Madras
is built of brick faced with stone, a section
of the Column as constructed will be seen on
page 225 of the Professional papers of the
Madras Engineers Vol. II.

Enclosures.

I have the honour to be,
Sir,

Your most obedient Servant,

As I am
28/4/96

Lt. Colonel R. L.
In charge Consulting Architect to Govt. D.

From

THE CONSULTING ARCHITECT

TO THE GOVERNMENT OF MADRAS,

To

THE Chief Engineer
P. W. D.

No. 4986

Dated

16th

Despatched

Received

March 1896.

NO. OF ENCLOSURES.

Subject.

Reporting that a plan of
the old Madras light-house
has been forwarded to the
Supy. Eng. I enclose in the
6th 3. 96

Lo No 78

Recd 17-3-96

Lo. with Cms 2160.

Cms
17/3/96

No. 4986

Recd 2
Office of the Consulting Architect to Govt.,
Chesauk, Madras,
16th March 1896.

From

Henry Swin, Esq., C.I.E.,
The Consulting Architect
to the Government of Madras,

To

The Chief Engineer
Public Works Department.

Sir,

Enclosures.

With reference to your Office No. 1069 c dated the 24th Ultimo, I have the honour to report that I forwarded a plan of the old Madras light-house to the Superintending Engineer & circled on the 6th instant.

I have the honor to be,

Sir,

Your most obedient Servant,

As 2/2/96

15/3/96
Lt. Colonel 188
In charge Consulting Architect to Govt.

Encls 5 (2 plans)

Ans: 3. 3. 96

From

THE CONSULTING ARCHITECT
TO THE GOVERNMENT OF MADRAS,

To

THE Chief Engineer
P. W. D.

No. 4685

Dated

Despatched

Received

2^d
February 1896.

No. OF ENCLOSURES.

Subject.

Submitting plan and
estimate for dismantling
the old Madras Light-
house Column.

Mundie (No 175/96)

Vide No 1084 & 25-2-96.

SPW

No. 4685

Office of the Consulting Architect to Govt.,
Chepauk, Madras,
2 March 1896.

From

Henry Swin, Esq., C.I.E.,

The Consulting Architect
to the Government of Madras,

To

The Chief Engineer
Public Works Department.

Sir,

With reference to G.O. No. 3034 dated
the 24th January 1896, I have the honour to
forward a plan of the old Madras light-house
column with an estimate amounting to
Rs 10139 for dismantling the same. The method
to be adopted is explained in the report
attached to the estimate.

3 Enclosures.

I have the honor to be,

Sir,

Your most obedient servant,

Ch. Swin
26.2.96

Lt. Colonel M.
In charge Consulting Architect to Govt. D.

(E. No. 3.)

CIRCLE—

DIVISION— Architect (No. 1)

DISTRICT— Madras

TALUK (OR ESTATE IN CASE OF ESTATE WORKS.)

ESTIMATE FORM.—Abstract.

Financial Head— ~~Provincial~~ Local

Budget Head— ~~Ind. Pub. Improvements~~

Departmental Head— Original Works

Main Head— Light House.

Sub-Head— ~~Construction~~

Project of which
the work forms part—

Section—

Name of Work— Dismantling
old Light-House Column
at Madras.

Amount of Estimate, Rs.— ¹⁰¹³⁹ 10,142

To be carried out by—

REFERENCES.

No. I. L. Office No. 599 Dated 21/2/96
with Plan Report Detail and two
Abstract —

O.W.E. 1
260/96

ESTIMATE FORM.—Abstract.

Quantity.	Description of Work.	Rate.	Per	Amount	TOTAL.
1	2	3	4	5	6
		RS.		RS.	RS.
	Brought forward No:			9134	
	Fitting up a derrick for lowering stones	L.S.		3001	
					9434
	Petty Supervision @ 2 1/2%			236	
	Contingencies @ 5%			472	
					708

Ch. Lamm
27.2.96

*Respected Mr. C. E.
In Charge Consulting Architects & Co.*

Grand Total of Estimate No. 10142 *Ch.*

STATION *Mucadhas*
Date *18.2* 1896.

30,000—15-5-95.

Geo. Kummer

G. A. Stephens
Assistant Engineer.

(E. No. 123.)

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS.)

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which
the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

(E. No. 123.)

Quantity.	Description of Work.	Rate.	Per	Amount	TOTAL.
1	2	3	4	5	6
		RS.		RS.	RS.
	Brought forward Rs.:			7117	
23,229 cft	Dismantling brickwork in 4 rooms and base of Columns	2rs.	cft 100	465	✓
7560 cft	Dismantling brickwork in column of light house	14rs.	"	1058	✓
1195 cft	Dismantling brickwork in latrine	2rs.	"	24	✓
49 Nos	Taking down doors & windows	2rs.	Each	98	✓
144 Rft	Removing Cast Iron railing	0.8rs	Rft	72	✓
	Removing Lightning Conductors	L.S.		50	✓
1 No	Removing Light Complete	L.S.		200	✓
	Removing iron metal railing on top of balcony	L.S.		20	✓
	Removing wooden railings outside of the Light House:	L.S.		30	✓
	Carried over Rs.:			9134	
Grand Total of Estimate ..					

STATION _____
 Date _____ 189 .

CIRCLE—

DIVISION—

DISTRICT—

TALUK (OR ESTATE IN CASE OF ESTATE WORKS.)

ESTIMATE FORM.—Abstract.

Financial Head—

Budget Head—

Departmental Head—

Main Head—

Sub-Head—

Project of which
the work forms part—

Section—

Name of Work—

Amount of Estimate, Rs.—

To be carried out by—

REFERENCES.

ESTIMATE FORM.—Abstract.

ESTIMATE FORM.—Detail Measurements.

Quantity.	Description of Work.	Rate.	Per	Amount	TOTAL.
1	2	3	4	5	6
		RS.		RS.	RS.
740	Diomantling cut stone for 4 rooms 11 feet from ground level including scaffolding and stacking	1.00	Each	740	
310	Do — for base of Column of light-house 13 feet from ground level including scaffolding and stacking	2.00	"	620	
454	Do — 1 st 30 1/2 feet in height above top of base Column including scaffolding and stacking	3.00	"	1362	
454	Do — for 2 nd 30 1/2 feet in height above top of base Column including scaffolding and stacking	4.00	"	1816	
462	Do — for 3 rd 30 1/2 feet in height above top of base Column including scaffolding and stacking	5.00	"	2310	
538 Cft	Diomantling cut stone for 4 rooms & latrine	0.80	Cft	269	
	Carried over to			7117	
Grand Total of Estimate ..					

STATION _____
 Date _____ 189 .

Detail of Work.	Number.	MEASUREMENTS IN FEET.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Taking down doors & windows						
Doors	4					
do	1					
Windows	1					
	1					
	2					
	40					
Removing Cast Iron railing inside of spiral						49
Removing Lightning Conductor & caps						144 Rft
					L.S. R. 50	
Removing Light Complete						No 1
Removing gun metal railing on top of Balcony						L.S. R. 20
Removing wooden railing outside of the light house						L.S. R. 30
Putting up a derrick for lowering stone						L.S. R. 300

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	MEASUREMENTS IN FEET.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Brought forward Cft:					18876	✓
Wallo	4	24-31-7 $\frac{1}{2}$	2-0		315	✓
do.	4	24-32-5 $\frac{1}{2}$	6-6		1550	✓
do.	4	24-03-25	6		1672	✓
do.	3	24-03-22	9		627	✓
do.	1	18-83-22	9		163	✓
					Total cft:	2322
mantling brick work in columns of Light House	1	30-0	3-0	84-0	7560	✓
					Total C ft,	7560
mantling brick work in Lathrie Base	2	18-6	2-3	2-0	167	✓
	1	14-0	2-3	2-0	63	✓
	1	10-6	2-3	2-0	47	✓
wallo	2	16-6	1-3	9-6	392	✓
	2	14-0	1-3	9-6	333	✓
Cistern	1	9-0	1-3	1-6	17	✓
Seats	2	5-0	2-0	0-9	15	✓
	1	3-0	2-0	0-9	5	✓
Servicing	1	13-8	13-8	0-10	156	✓
						119

ESTIMATE FORM.—Detail Measurements.

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	MEASUREMENTS IN FEET.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Dismantling cut stone						
4 rooms flooring.	1	12-6	12-6	0-6	78	X
do — passage	1	27-6	3-6	0-6	48	X
do —	1	11-0	3-0	0-6	17	X
do —	1	7-9	3-7	0-6	77	X
Latinic Bandstones in walls	2	17-4	2-1	0-9	54	X
	2	13-2	2-1	0-9	41	X
Cornice stones	2	20-6	3-6	0-7½	90	X
	2	13-8	3-6	0-7½	60	X
Binding stones	19	3-6	1-3	0-10	78	X
					534	
					538	
Dismantling brickwork in 4						
rooms and base of Columns:						
4 rooms: Binding walls:	8	14-0	12-0	1-0	1344	X
do.	8	11-6	2-0	1-0	184	X
roofing	4	14-0	14-0	0-10	653	X
Cornice	4	11-6	0-6	0-9	17	X
do.	4	12-6	0-6	0-9	19	X
walls	4	12-6	1-2	9-9	569	X
do.	4	12-6	1-2	9-0	525	X
do.	4	14-8	1-2	9-9	667	X
do.	4	14-8	1-2	9-0	616	X
Base of Columns	1	28-0	28-0	8-10	6925	X
do —	1	26-4	26-4	9-7	6646	X
Dome	4	24-3	3-8	2-0	711	X

ESTIMATE FORM.—Detail Measurements.

Detail of Work.	Number.	MEASUREMENTS IN FEET.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Dismantling cut stone for 2 nd 30½ feet						
in height						
Outer stones of Column	16	24			384	X
Inner spiral steps					70	X
						454
Dismantling cut stone for 3 rd 30½ feet						
in height:						
Outer stones of Column	10	24			240	X
Inner spiral steps					70	X
Balcony stones					20	X
do					40	X
Landing stones					30	X
Parapet					20	X
Stone under light					2	X
do.					20	X
do					20	X
						462

ESTIMATE FORM.—Detail Measurements.

P. W. D. FORM,
No. M 201.

Detail of Work.	Number.	MEASUREMENTS IN FEET.			Area or Contents.	Total Quantity of each description of Work.
		Length.	Breadth.	Depth.		
1	2	3	4	5	6	7
Dismantling Cut stone for 4 rooms 11 feet from ground level						
Binding wall stones	70					
Cornice stones	80					
do.	100					
do.	80					
wall stones	80					
do.	140					
Base stones	50					
4 rooms Band stones	50					
door frame stones	10					
Ventilator stones	10					
do.	10					
Granite stones outside fixed in wooden railing	60					
Dismantling Cut stone for base of Column of light House 18 feet from ground level						
base of Column	140					
Steps risers	80					
Steps treads	90					
Dismantling Cut stone 1 ³ / ₄ 30 ¹ / ₂ feet in height above top of base Column						
Outer stones of Column 16x24						
Inner spiral steps						

740

310

384
70

454

A crane similar to the one used for the construction of the light house will also be used for dismantling, a plan of which is also now sent.

From the report on the construction of the light house (see Professional Papers of the Madras Engineers Vol II) many of the stones are mentioned as over 1¹/₂ tons in weight. For this reason, as well as on account of the height and the confined area to work on, special rates have been entered in the estimate.

Ch. S. S. S.
27.2.96

Leut. Col R E
In charge Consulting Architect Division

Over 3
260/96

Report and specification to accompany the plan and estimate for

dismantling the old Light House Column
at Madras

Amount of Estimate, Rs. 10139

Reference.—

G.O No. 303 N dated 24
January 1896

REPORT.

This estimate provides for dismantling the old light-house which is 125 feet high. It consists of a stone base 18 feet high, a Doric Column 91 feet high, and an upper pedestal of stone on which the machinery of the light rests.

The dismantling will have to be done very carefully, each separate stone being separately removed, and lowered without damage to its edges. Each course of stone and each stone in a course will be separately numbered, so that the position of each stone in the structure will be definitely known, and can be fitted again into its place. The method by which this numbering will be done is shown the accompanying plan.

CHW
H.C.

List of papers sent to Mr. Ashpitel Esq., Afton
 House, on 6th July 1896.

File 1... Co. 2257 W d/7.9.94. File 4... Marine CN: 728.

" 538 W d/7.3.95

" 700 W d/22.3.95

" 1029 W d/4.5.95

" 1652 W d/6.7.95

" 1809 W d/23.7.95

" 1824 W d/24.7.95

" 686 W d/22.3.95

" 1222 W d/22.5.95

" 2712 C d/9.9.95

" 3085 C d/24.10.95

" 2724 W d/29.10.95 Orig

Alms 2681 C d/5.9.95

" 4132 C d/21.12.95

Co. 845 W d/21.2.96

" 1084 C d/25.2.96

" 245-6 Mar d/8.4.96

File 5... Co. 301 Mar d/4.5.96.

245.6 - d/8.4.96

Marine CN: 737

Supp 67

Don't
 promise

File 2... CN: 4590.

File 3... Co. 1252 Mar d/8.7.90

" 196 " d/12.5.91

" 480 " d/28.10.91

" 264 " d/2.12.91

" 79 " d/9.4.92

" 188.7 " d/3.6.92

" 288 " d/5.8.92

" 183 " d/5.6.93

" 184 " d/3.10.93

" 286 " d/5.7.94

" 318 " d/10.8.94

" 381 " d/28.5.96

" 245.6 "

376 Mar d/27.5.96

Marine CN: 729

" 381 "

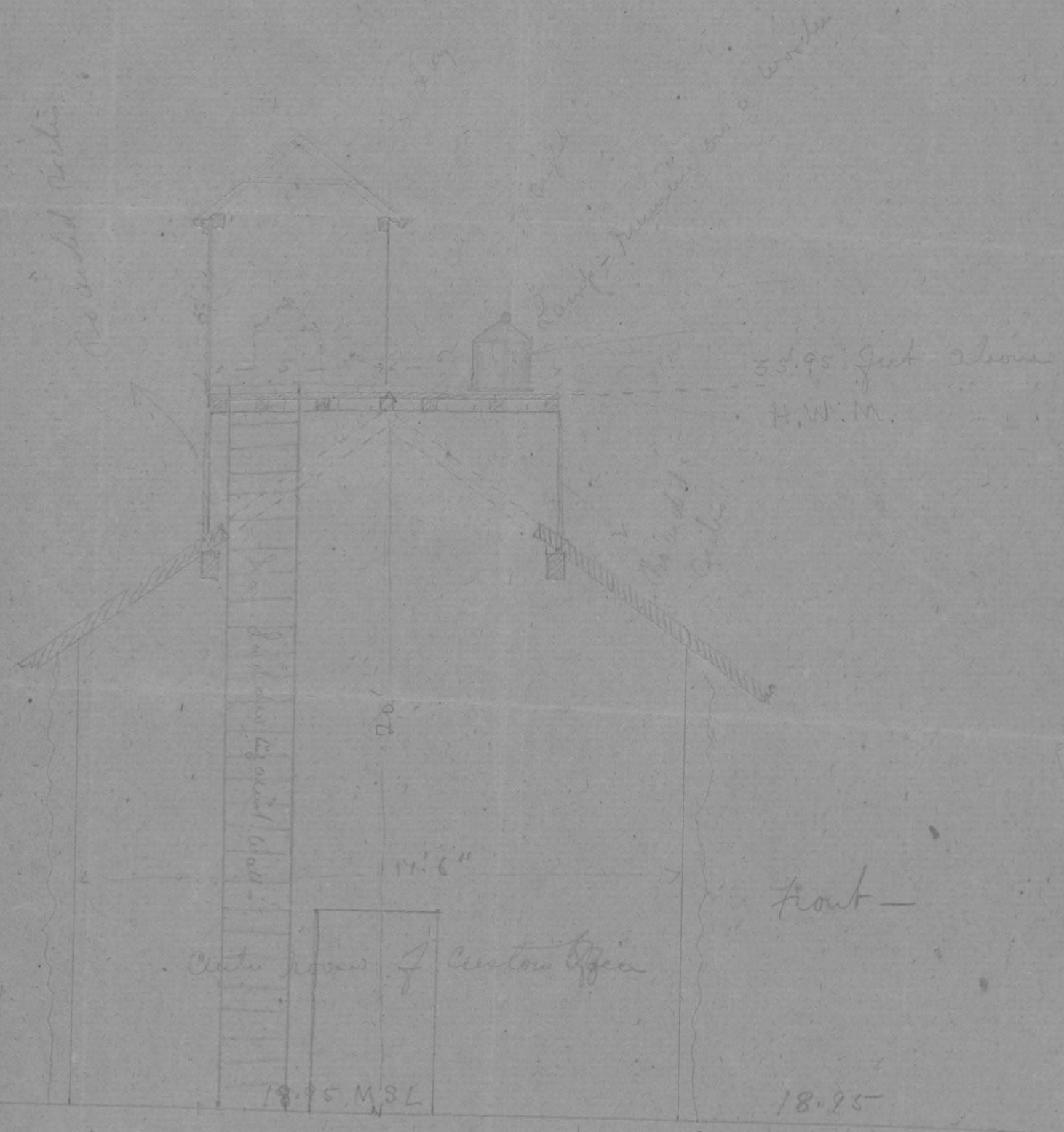
" 245.6 "



Marine
 729

Certain papers relating to —, recorded
 pending the submission of the detailed pro-
 posals promised by Mr. Ashpitel.

Sketch
 Proposed alterations to Custom Office & place
 the light on its roof



Scale 4" = 1"

J. H. Day

N: 376 Mar 27. 5. 96 - 266 - d/ 5.7.94
 Marine CN: 729 - 318 - d/ 10.8.94
 - 381 - d/ 28.5.96
 - 445.6 - d/ 8.4.96

No. 506, MARINE, 17TH JULY 1896.

GOVERNMENT OF MADRAS.
 MARINE DEPARTMENT.

READ—the following papers :—

From Lieutenant-Colonel C. C. RAWSON, R.E., in charge Consulting Architect Division, to the Chief Engineer, Public Works Department, dated Chepāk, 2nd March 1896, No. 4685.

With reference to G.O. No. 303 W., dated the 24th January 1896, I have the honour to forward a plan of the old Madras lighthouse column with an estimate, amounting to Rs. 10,139, for dismantling the same. The method to be adopted is explained in the report attached to the estimate.

From Lieutenant-Colonel C. C. RAWSON, R.E., in charge Consulting Architect Division, to the Chief Engineer, Public Works Department, dated Chepāk, 16th March 1896, No. 4986.

With reference to your office-note No. 1069 C., dated the 24th ultimo, I have the honour to report that I forwarded a plan of the old Madras lighthouse to the Superintending Engineer, I Circle, on the 6th instant.

From Lieutenant-Colonel C. C. RAWSON, R.E., in charge Consulting Architect Division, to the Chief Engineer, Public Works Department, dated Chepāk, 23rd April 1896, No. 432.

In reply to your memorandum No. 219 E., dated the 23rd instant, I have the honour to report that the old lighthouse column at Madras is built of brick faced with stone. A section of the column as constructed will be seen on page 225 of the Professional Papers of the Madras Engineers, Volume II.

From Lieutenant-Colonel C. C. RAWSON, R.E., in charge Consulting Architect Division, to the Chief Engineer, Public Works Department, dated Chepāk, 11th May 1896, No. 666.

With reference to your reminder No. 303/1 W., dated the 6th instant, I have the honour to report that an estimate amounting to Rs. 10,139 for dismantling the old lighthouse column at Madras, was submitted to you with this office letter No. 4685, dated 2nd March 1896.

From Major W. L. C. BADDELEY, R.E., Superintending Engineer, II Circle, to the Chief Engineer, Public Works Department, dated Bezvada, 15th May 1896, No. 405 K.E.

In reference to paragraphs 8 (m) and 21 of G.O. No. 245 (Marine) of 1896, I have the honour to request that I may be supplied with working drawings for the proposed lighthouse and subsidiary buildings at False Point Divi.

2. A site plan on a large scale will also be required, with the exact position of the lighthouse marked by bearings, when the Presidency Port Officer has definitely decided the question; which apparently should take precedence of the preparation of the drawings for the construction.

3. As regards the proposed new lighthouse at Seven Pagodas, I have, on a reference made by the Superintending Engineer, V Circle, informed him that I think it would be most advisable for the work to be undertaken in the V Circle, for as observed by him, the Cooum Improvements scheme will throw much work on the Buckingham Canal division.

From F. W. ASHPITEL, Esq., Executive Engineer, Coimbatore Division, to the Secretary to Government, Marine Department, dated 26th June 1896, No. 2081.

I have the honour to inform you that the Superintending Engineer, VI Circle, has requested me to make suggestions for the design of improvements to Pámban light-house in accordance with the order conveyed in G.O. No. 1506 W., dated 15th May 1896, but I have deferred replying to his letter as I believe that additional orders on the subject will issue shortly.

2. In appendix B of my report printed with G.O. No. 245, Marine, dated 8th April 1896, I remarked that "a lantern will be available from one of the lights proposed to be abandoned, and when it is fixed, the whole of the lighthouse and its buildings require to be thoroughly overhauled." Until it is decided what lantern is to be fixed at Pámban, the preparation of plans and estimates seems inadvisable, and I would also suggest that it is not advisable to carry out details of the proposed scheme of light-house improvements without reference to that scheme as a whole. Pámban light has been in its present state for some years, and it will not matter leaving it for a few months more in its present state, as the proposed improvements will not materially enhance its value to mariners.

From F. W. ASHPITEL, Esq., Executive Engineer, Coimbatore Division, to the Secretary to Government, Marine Department, dated 26th June 1896, No. 2082.

I have the honour to forward herewith letter No. 1271/101 P.W., dated 8th June 1896, and to request instructions. The alterations to the Gopalpur light sketched by the Assistant Engineer appear to me to be absolutely unsuitable, as the building is evidently not suited for the installation of any light. Apart from the consideration that the roof was never designed to carry a heavy additional weight, the danger from fire would be very considerable, and the arrangements, generally, most inconvenient.

2. I was under the impression that the Customs House at Gopalpur had a terrace roof which could easily be adapted to carry the light apparatus, and if this is not the case, other arrangements could be made without much expense.

3. I refer this question to you as I do not know what my duties are, and as the sanctioned scheme of lighthouse improvements is to be carried out shortly, I would suggest that it is not advisable to carry out details without reference to the complete scheme.

ENCLOSURE.

From Commander H. A. STREET, R.I.M., Presidency Port Officer, Madras, to F. W. ASHPITEL, Esq., Clifton Grange, Ootacamund, dated 8th June 1896, No. 1271/101 P.W.

With reference to the proposals contained in your recent report to Government, in connection with the flagstaff light at Gopalpur, I forward, for favour of your opinion in the matter, a sketch furnished by the Assistant Engineer, Ganjam division, for placing the light in question on the Custom House.

2. The local Port officer thinks it would be better to build the covering over the light and thus do away with the necessity of sliding the light in and out, as would have to be done according to the present plan.

From Commander H. A. STREET, R.I.M., Presidency Port Officer, Madras, to the Secretary to Government, Marine Department, dated 30th June 1896, No. 1271/225 G.

The decision contained in paragraph 3 of G.O. No. 301, Marine, dated 4th May 1896, affects the recommendation made by Mr. Ashpitel regarding the light and light tower at Tellicherry (see page 31 of G.O., Marine, No. 245 of 8th April 1896, under heading "Tellicherry") and as in my opinion a more powerful apparatus is necessary, I submit that the change in the height of the tower as recommended by Mr. Ashpitel in the order above quoted should stand over, pending a decision as to the most suitable light apparatus to take the place of the one now in use.

From G. P. CARLESS, Esq., Executive Engineer, West Coast Division, to the Superintending Engineer, IV Circle, dated Calicut, 18th June 1896, No. 294 S.E.

I have the honour to forward, herewith, tracings of the Cannanore and Tellicherry lights, as requested in your endorsement No. 202 W.C., dated 15th May 1896, on the Presidency Port Officer's letter No. 1271/64 P.W., dated 24th April 1896.

It was evident from an inspection of the building that the Tellicherry light could not be lowered, in fact, that it should be raised, and I accordingly wrote to the Port officer asking him for his opinion as to providing a lamp-room as well as to the other alterations. His reply is herewith enclosed, and effectually disposes with the proposed lowering (see also G.O. No. 2268 W., dated 4th September 1893).

Cannanore is a similar light as regards power, &c., but the lamp-room is situated below the light in the tower, which, if altered, another room for the storage of oil will have to be built.

ENCLOSURE.

From Lieutenant H. S. BROWN, R.N.R., Port Officer, Tellicherry, to the Executive Engineer, West Coast Division, dated 5th June 1896, No. 11/3.

In answer to your No. A., dated 4th June 1896, regarding the lighthouses at Cannanore and Tellicherry, I have the honour to state that, in my opinion, the lowering apparatus into a lamp-room is not necessary and a needless expenditure would be incurred. The existing arrangements are all that is necessary with lights of this description, and no inconvenience has been experienced hitherto. With regard to the shortening of the Tellicherry tower, I should say

It is, most certainly—it is impossible to distinguish it from the lower lights. the fact of doing so would render the light absolutely useless. The light is a most insignificant one, and its only redeeming point is that it is higher than all the other lights round

(Intld.) J. C. L.

about it in the town, and this is the only way by which the light can be distinguished as every shipmaster who has ever visited the port will testify to. Again if the tower were shortened, all the trees in the church compounds immediately in front of it would have to be destroyed and the belfries of both the Protestant and Roman Catholic churches would have to be fore-shortened.

If, however, Mr. Ashpitel's suggestion is adhered to, I would propose that the light be changed to a green one, as otherwise it would be absolutely impossible to distinguish it from any of the lamps round about it in the houses and streets, and am not at all exaggerating facts in making this statement. It should, I think, be remembered that this is only a port and anchoring light, and therefore the fact that the height of the tower tends to diminish the power of the light is not of any great importance practically, although it is no doubt wrong theoretically.

Whether the tower is shortened or not, I still think that it would be a good thing to make it a green light, and I have consulted many of the masters of the coasting steamers who are unanimously in favour of such a change.

If the tower was interfered with at all, I should say the tower should be raised 15 feet higher as was proposed in 1894 (see G.O., Financial, No. 1, dated 4th January 1894).

No. 308 W.

Forwarded to the Chief Engineer, Public Works Department, with tracings of the light towers in question. I can fully endorse the remarks regarding Tellicherry light. The Commander of the S.S. *Culna* (which conveyed me to Mangalore) could not determine which was the port light.

29th June 1896.

(Signed) J. C. LARMINIE,
Suptg. Engineer, IV Circle.

No. 506, MARINE, 17TH JULY 1896.

No. 674 D.

Referred to the Marine Department.

9th July 1896.

(Signed) D. McNEIL CAMPBELL, Col., R.E.,
Chief Engineer.

From F. W. ASHPITEL, Esq., Executive Engineer, Coimbatore Division, to the
Secretary to Government, Marine Department, dated 15th July 1896.

I have the honour to return, herewith, the accompanying papers relating to light-
house construction, and to request that, as Captain Street has with certain modifica-
tions agreed to the scheme for lighthouse improvement recently sanctioned, there is
no need for further action.

2. Detailed proposals and estimates will be submitted in due course.

ORDER—No. 506, Marine, dated 17th July 1896.

Under the circumstances explained by Mr. Ashpittel in his letter of the 15th July
1896, the papers read above will be recorded, pending the submission of the detailed
proposals promised.

(True Extract.)

Under Secretary to Government.

To F. W. Ashpittel, Esq.
„ the Presidency Port Officer.

Gobt. of {1896} Madras.
MARINE.

Dated July, 17th.

Recd.

Encl.

G.O. No. 506, 17th July 1896.

JULY.

Lighthouse Construction

Certain papers relating to —, recorded pending the submission of the detailed proposals promised by Mr. Ashpitel.

No. 1057, JUDICIAL, 23RD JUNE 1896.

GOVERNMENT OF MADRAS.
JUDICIAL DEPARTMENT.

READ—the following paper:—

From J. P. HEWETT, Esq., C.I.E., Secretary to the Government of India, Home Department (Public), to the Chief Secretary to the Government of Madras, dated Simla, the 8th May 1896, No. 12-Pub.—854.

The system of identifying persons by means of impressions of the tips of their fingers has been successfully employed for several years in the Registration Department in Bengal, and has been incorporated with the anthropometric system adopted in that Province for the identification of criminals. Recently it has been represented to the Government of India that the use of finger-prints for the purpose of identification is capable of being extended in various directions with great benefit to the public service. The Government of India have accordingly caused a note, describing the system in outline, to be drawn up, a copy of which is forwarded herewith for the information of the Government of Madras. Particulars as to the sources of more complete information can be obtained if desired from this office: but the Government of India apprehend that Local Governments will have no difficulty in obtaining for themselves more detailed information if they wish to make enquiry on the subject. At present the Governor-General in Council only desires to bring the uses of the system prominently before the notice of the Government of Madras, which will judge as to the advisability of adopting it for any public purpose in the Madras Presidency. If it is adopted, I am to ask that the Government of India may be informed of the fact and also may be acquainted, after intervals of not more than a year, with the progress made in working the system and the degree of usefulness ascribed to it.

ENCLOSURE.

System of Identification by Finger-prints.

Every one bears on his body a visible token of identity in the system of ramification of the minute ridges that run across the palms of the hands and the soles of the feet, and more especially in the scrolls or other patterns that the ridges form on the inner surfaces of the bulbs of the fingers. These latter are believed to be in themselves amply sufficient for purposes of identification. The value of finger-prints as a means of identification is thus testified to by the committee which was appointed by the Secretary of State of the Home Department in London to enquire into the best means available for identifying habitual criminals:—“The finger-prints will afford in most cases the scientific proof of identity, and wherever the system is applied will render a wrong identification practically impossible.”

Mr. Francis Galton, who gave evidence before the committee, has established the following facts in connection with the subject. The marks are persistent through life. There is an enormous variety of them in different individuals, and although there is some deterioration on account of age, the pattern can still be made out. Even after burns the original marks reappear as before. In cases of severe cuts or ulcers there may be distortion, but short of very serious injury the marks would not be destroyed. The improbability of the prints being the same in two sets of two or three fingers is so enormous that it can hardly be put into figures. The prints therefore form a signature which cannot be imitated.

2. The following is a rough outline of the method in which it has been proposed by Mr. Galton to make use of this means of identification. The minute ridges covering the bulbs of the fingers (which are really slight elevations of the skin containing at intervals small holes or pores) would run straight across the fingers from side to side up to the very tip—just as they do

in the lower part of the finger—but for the nail, which disturbs their parallelism and squeezes them downwards at either side of the finger. Consequently the ridges that run close to the tip are greatly arched; those that successively follow are gradually less so, until in some cases the arch insensibly disappears about the level of the joint. Usually, however, the gradual transition from an arch to a straight line fails to be carried out, and there is a break in the sequence and a consequent interspace. The uppermost boundary of the interspace is formed by the lowermost arch, and the lowermost boundary by the uppermost straight ridge. As the usual number of holes or pores exist within the interspace, the ridges containing them form an independent scroll-work which has been termed the pattern by Mr. Galton. These patterns, almost without exception, can be classified as belonging to three main shapes or designs, to which respectively Mr. Galton has applied the names of Primaries (lines arched, whether upwards or downwards, across the finger), Whorls and Loops.

3. The identification consists in tracing (by the aid of a magnifying glass) the same lines or ridges, and the same peculiarities in them, in impressions made by the same finger at whatever distance of years. The length and thickness of the lines will vary with age and differing conditions of body, but this does not prevent the impression of the finger from being recognized with certainty. The classification of individuals, which is necessary for purposes of record and reference, is arranged for by Mr. Galton in the following manner. Taking the three varieties of patterns abovementioned, and subdividing each into two according as the slope of the lines is upwards or downwards from the side, he has six possible varieties of fingers, to which severally are assigned the numbers 1 to 6. The numerical sign for each individual is the numbers thus borne by his fingers in a fixed order (Mr. Galton thinks it might suffice, for the identification of criminals, to take six fingers only). A number of classes of manageable size result, which can be subdivided by adding further particulars till the search for prints corresponding with those sought to be compared becomes a matter of no great difficulty.

4. For the purpose of identifying any one with a person who he claims or is supposed to be, no classification is required but merely comparison of two prints taken from the fingers at two different periods to see whether they agree. It seems to be established that, if they do not agree, even after the lapse of many years, they cannot have been made by the same individual. In cases of classifying a large number of persons or of identifying criminals, the services of an expert would be required, but in ordinary cases the two sets of prints would be enlarged by photography or be examined by a magnifying glass, and there would be no difficulty in discovering whether they had been made by the same or by two different hands.

5 As regards the mode of taking finger-prints, the recommendations of the Home Secretary's committee are briefly as follows:—

- (1) A plate of copper screwed by its corners down to a board one inch thick, an ordinary printer's roller, two tubes of printer's ink, some benzole and cards, should be provided.
- (2) Less than a drop of ink should be squeezed on the plate and worked with the roller till it forms an even layer on the surface, which must be so thin as to allow the copper colour to show through it.
- (3) The man's right hand should then be taken and the bulbs of the fingers laid on the inked plate and pressed gently but firmly with the operator's own hand. The inked fingers should then be placed flat on the card, so that imprints may be taken.
- (4) The roller and slab must be thoroughly cleaned with benzol and dried with a rag and put out of the way of dust. The fingers may also be readily cleaned with benzole or turpentine.

A piece of glass will do as well as the copper. The ordinary native ink, diluted with a little oil, may do. Experience has shown that imprints can be made with sufficient distinctness by non-expert persons using such ink. If the prints are taken on a small piece of white paper, the operation can be repeated several times, or until a perfect specimen is obtained, and this can be gummed on to any document with which it is desired to preserve the print.

6. The system of identification by finger-prints appears to be capable of utilisation in various ways in the Civil department. It has already been incorporated with the anthropometric system introduced into Bengal by Mr. Henry, Inspector-General of Police, and has been successfully employed in the identification of criminals. It may eventually, if Mr. F. Galton's views are correct, be possible to identify persons by finger-prints alone. For the present, however, for the identification of criminals, this method has to be associated with anthropometry, and only helps to make identification under that system absolutely certain.

The system of finger-prints has also been introduced in the Registration Department in Bengal for securing the identification of parties and their witnesses in the registration of deeds. It was brought into operation in all Sadr Registration offices from the 1st June 1894, and has since been introduced into the subordinate offices. It has already helped in the detection of two cases of false personation.

The system is likely to prove an important safeguard in preventing false personation in the case of pensioners, especially females. Applicants for payment of pension might be compelled, in case of doubt as to their identity, to produce fresh impressions of their fingers for comparison with their standard prints which would be kept in the pension offices. This evidence would be especially valuable in the case of *Purdanashin* women, whose impressions could be obtained through their relatives or friends. The Government of India propose to introduce this system into Lower Bengal, as an experimental measure at present, for the purpose of identifying Government pensioners.

The system might be useful in identifying the next-of-kin, if Government servants were required to have affixed to their service books the finger-prints of those who were recognized as their heirs. It might also be usefully employed for the identification of competitors at public examinations. It has further been suggested that impressions may be taken of the finger-tips of all candidates for the public service; and that they may be attached to all legal documents in the courts. Emigrants might also be required to leave their finger-prints as a token of their identity. And if the method proves an effective means of identification, it is probable that it could be put to various other uses.

7. The system of taking impressions of finger-tips was adopted in 1893 in recruiting for the Native Army, but it was considered unnecessary and abandoned last year, false personation being almost unknown in the army. The Home authorities are, it is believed, about to introduce anthropometry combined with finger-prints for recruiting purposes, and there is little doubt that this will prove of the greatest use in detecting the re-enlistment of deserters. In the Recruiting Department the system may also be adopted as a check against false personation by persons who claim to be the persons passed by the medical authority.

ORDER—No. 1057, Judicial, dated 23rd June 1896.

The foregoing letter from the Government of India, with its enclosure, will be communicated to the Lieutenant-General Commanding the Forces, to the Honourable the Judges of the High Court, to all Departments of the Secretariat, and to the Inspector-General of Police, Prisons and Registration for information.

2. As systems of identification by means of finger-prints have already been introduced in the Police and Registration Departments, the respective Inspectors-General will be requested to prepare and forward the annual reports called for by the Government of India. The first report should be submitted towards the close of 1896.

3. The following letter will be despatched to the Government of India:—

[Here enter No. 1058, dated 23rd June 1896.]

(True Extract.)

Francis
Chief Secretary.

To all Departments of the Secretariat. *Mar*
" the Deputy Adjutant-General, Madras Command.
" the Inspector-General of Police.
" " of Prisons.
" " of Registration.
" the Honourable the Chief Justice, with C.L.

B.

Communicated to
the Presidency Post Office

16/7/84

The P.P.O. with reference to
C.P.

Identification by means of Finger-prints.

Communicating to the Lieutenant-General Commanding the Forces, &c., letter from the Government of India regarding the uses of the system of —; requesting the Inspectors-General of Police and Registration to prepare and forward annual reports on the progress made in working the system in their departments; and addressing the Government of India on the subject.

warehouse goods upon warrant, and at the expiration of four months, deliver to the Collector any goods not then cleared through the Sea Customs Office." I have the honour to inform you that the Chamber has desired me to again express a hope that early orders may be passed on the above recommendation, as pending such it understands that the Harbour Trust Board is unable to make arrangements for proceeding with the other improvements recommended by the Harbour Improvements Committee.

I have the honour to be,

Dr.

CHIEF SECRETARY
15. JUL. 1896
GOVERNMENT OF MADRAS

2nd not observed.

Pro. K. Chambers.
Chairman

The Madras Chamber of Commerce,
Madras, 14th July 1896.

FROM

The Honble W. G. L. Chambers,
CHAIRMAN, CHAMBER OF COMMERCE,
MADRAS.

TO

The Chief Secretary to Government,
Marine Department,
Cobacammur.

Sir,

With reference to my letter of the 24th August 1895, in which I drew the attention of Government to para 15 of the Report of the Harbour Improvements Committee appointed under G. O. dated 9th February 1895, N^o. 47 Marine - which para contained a strong recommendation in favour of the adoption at Madras of the procedure existing at Bombay "by which the Harbour Trust Board would remove into their ^{Sheds} all cargo, as landed, deliver the same upon pass orders from the Collector,

Government of Madras.
1896.

Marine
P. W. DEPARTMENT.

CURRENT No.

DISPOSAL.

Recd 16.7.96

No.

dated

From

*The Chairman,
Chamber of Commerce*

No.

ENCLOS.

Dated

4.7.96

Received

16.7.96

SUBJECT.

*Cargo landed in the Port of
Madras
Requesting an early reply
to his letter of 24 August 1895
drawing attention to the recom-
mendation of the Harbour
Improvement Committee
to transfer the Harbour Trust
Boat to the custody & issue of*

*Read this paper
with Ch. 765 - She carries
order with them cover both
papers.*

*17/2/96
M*

*Man Encl
765/96*

EXTRACT of Proceedings of the TRUSTEES OF THE HARBOUR

OF MADRAS, at a Meeting held at the Offices of the

Board on Friday the 19 day

of June 1896

5. Read letter No. 62500.

Dated 11th June 1896, from the Presidency
Port Office, suggesting additional
temporary facilities for landing cargo.

Read minutes by Trustees.

Resolved that the Chairman

is invited to address Government
with reference to the proposed

Boat-basin and Improved Customs

House arrangements recommended

by the Harbour Improvements Committee

appointed by Government under

L. C. Marine, No. 47, dated 9th

February 1895.

True Extract

Assistant

Secretary

Harbour Trust Board

HARBOUR TRUST

MADRAS 22 JUN. 96

SECRETARY'S OFFICE

copy of resolution then passed thereon.

The question of the custody
of the goods when landed, which was
so strongly recommended by the Harbour
Improvements Committee should be
vested in the Harbour Trustees, as at
Bombay, is regarded by the Board
as the key of the whole situation
and it therefore hopes that Government
will see its way to pass early orders
on this point, for unless the proposals
of the Chamber of Commerce are
sanctioned, the Board will not
be justified in incurring any
heavy outlay of Harbour Trust
funds.

I have the honour to

Sir

Your obedient servant

W. A. S. S. S.

Chairman

Harbour Trust Board

Secy:

Secy

Vide para 15 of the Committee's report and para 4 of L. C. Marine No. 119 dated 26th Feb. 1896. The reply from the Rev. Sept. is still awaited.

Harbour Trust Office,
MADRAS, 11th July 1896

No. 1471

FROM

W. Austin Esq. I. C. S.

CHAIRMAN, HARBOUR TRUST BOARD,
MADRAS.

TO

The Honble Col. D. Mc Neil Campbell

Joint SECRETARY TO GOVERNMENT,
Marine Department.

Sir,

In view of a recent block of work upon the iron screw pile pier when the appliances thereon proved inadequate to meet the import and export movements of cargo proceeding simultaneously, the Presidency Port Office, in a letter dated 11th June suggested that two low pontoon jetties, extending from the beach into the Harbour, should be constructed to relieve the traffic on the pier.

2. This proposal was considered by the Trustees at their meeting of the 19th June, and I submit herewith

Cobu

MARINE DEPARTMENT.

FROM
THE CHAIRMAN,
HARBOUR TRUST BOARD,
MADRAS.

TO
THE SECRETARY TO GOVERNMENT,
Marine Department.

DATED 11th July 26

DESPATCHED 11th —

RECEIVED

ENCLOSURE *encl*

No. 1471

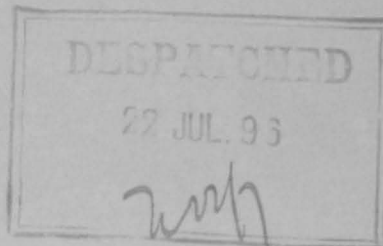
SUBJECT.

*Soliciting the favour of
early orders upon the re-
-Commencement of the
Harbour Improvements &
Committee that the Custody
of goods landed at Madras
should be vested in the
Trustees of the Harbour*

SCOT THE PAGES.

*The Res. Dept
Ch. H. S. Bd*

L.S.



1st Reminders Sent 1896

*298 E. 075-6-96 765
119-20 March 26-2-96 + despatch
297 March 8-10-95. Encl 9
190 March 1-7-95. Recd 137 96
47 March 2-2-96
7, 916 of 96 Recd Chas 765
+ 778
No. 503 Marine d/16 July 1897
Communicated, in
Continuation of para 4 of
No. 119. Marine, dated 26
February 1896, and subse-
quent reminders, to the
Revenue Department for
early consideration of the
question of the transfer to
the Harbour Trust Board
of the custody of imported
goods.*

16/7/93

*200 300 of 97
marine*

Pension Department.

F. 505-20-3-96.
18

No. 27.

OFFICIAL MEMORANDUM.

The Heads of Departments are requested to forward, for the information of Government, a complete list of heads of offices under them who submit pension applications.

(By Order.)

(Signed) LIONEL DAVIDSON,
Ag. Under Secretary to Government.

PENSION DEPARTMENT,
REVENUE SECRETARIAT,
Fort St. George,
20th March 1896.

To
The Public Department,
" Revenue Department,
" Local and Municipal Department,
" Public Works Department,

for communication to Heads of departments under them.

23/7

Pension Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.
-----:::-----

Read Memorandum from the Marine Department, No.
326 E, dated 22nd June 1896.

Order thereon, No. 588A, dated 9th July 1896.

Ordered accordingly; the date of the Memorandum is
" 20th March " not "20th May".

(True Extract)

Lonel Davidson
11.7

Ag. Under Secretary to Govt.

To

The Marine Dept., with copy of Memo, No. 27, dated 20th

March 1896.

Govt. of {1896} Madras.
Revenue
REVENUE.

To

The Marine Department.

Dated

Recd.

Encl.

Mis. G.O., 9th July 1896, No.

SUBJECT.

Furnishing the Marine Dept.
(Revenue)
with a copy of the Memo, No.27, dated
20th March 1896.

DESPATCHED
22 JUL. 96
unh

The P.P.O.

L.S.

14/7/96

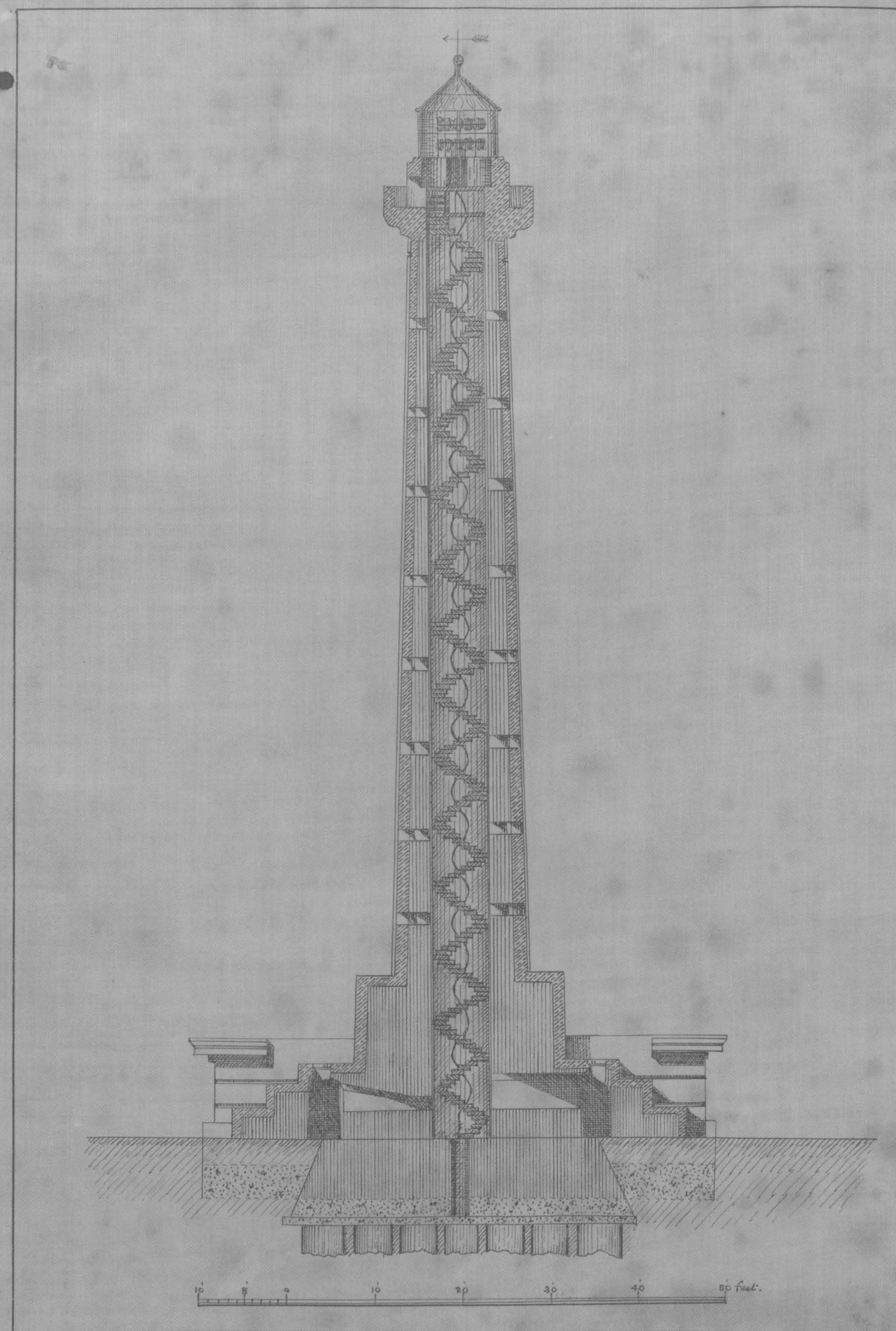
*P. No. 3957.7-8-96
No. 326 & 22656
+ C.D. 855/96*

No. 502 received 9/14 July 1896

*Communicated to
the Presidency Port office
for supply of the required
information.*

*Red H. 7/96
Encl.*

22/7



Section of Madras Light house.

W. V. 96.

Cin 4043

CAW

forwarded, previous
papers being at 1043.
To avoid sending up
the bulky volume of
Professional Papers, I have
sent a copy of the
section of the Lighthouse
code. If orders
however, the book
will be forwarded.

Cin
4/9/96.

BW

Submitted.

L.F.

W

5 May 96

The idea of using
the materials of the
Madras Lighthouse for
constructing a lighthouse at
Sacramento Shoal must,
apparently, be given up. An
estimate for a lighthouse at
Sacramento Shoal might,
perhaps, be called for
independently. The prepared
on such lines as we

be indicated by the Hospital
Subject then approval
of the Presidency
Office.

copy

6.5.96.

(1) Has the estimate for despatch
the hospital been received
if it is there I am ⁱⁿ for it.
I think I must see it
the way of doing the matters
therein & they can be
told of an error.

As regards the hospital
or hospital care I think
I have better say that
the hospital is not a
I propose to carry ^{out} the
work of the hospital.

1/5/96

(1) So far as the Odicamund
office is aware, no estimate
has been received. A reminder
to the C.A. is submitted.

R.S.
6 May 96.

Noted R.S. 9 May 96

U.S.

(11)

The question of a new
permanent light house
to guard the Sacramento
Should be to be under
under his instructions
dated 6 May 96. until
Mr. Ashpitel replies to
the reference made to
him in regard to Marine
work generally - vide Memo
no. 119 D. of 6 May 1896

Enter in the L.O. Register
note for the reply to the
Memo. in question.

R.F.
9 May 96

+ vide Correspondence
ending with no. 1084 C of
25 Feb 96.

C No. 4043

4420

For orders.

The estimate of the cost of dismantling the old Madras light column amounts to Rs 10,139.

The S. E. C. Circle has not yet submitted a final reply to Memo No. 1084 C d/25 Feb 96 in which he was asked for alternative estimates for erecting a light house on Saeminto Shoal.

Meanwhile the general question of light house construction has been committed to Mr. Ashpitel for consideration.

R.B.

21 May 96

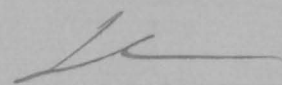
If no use can be made of the material it would seem a great waste of money to spend Rs 10,139 in dismantling the Madras Light House which does no harm.

C. H. S.

21.5.96.

Madras Light House

The question of dismantling
the old Madras Light House
can be seen from the
estimate for the new
Lighthouse ~~has been~~
an ~~unsuccessful~~ proposition of
the Engineer who can then
report if the materials are
of any use
The Lighthouse has to be
dismantled in any case as it
spoils the picturesque
effect of the new Lighthouse
Costs as if the materials
cannot be used in other
works they must be sold at
auction


21/5/86

C No. 4420
4040.
2713.
2600 costs
22.5.96.
Lionel
S. J.
22 May 86.
17 June 86.

C No: 4013

C No: 4590

W

No orders can apparently
be passed on this paper
until a decision is come
to in regard to Mr.
Ashpitt's proposals for
carrying out the works.
Mr. Ashpitt has not
yet replied to the last
reference made to him
as to the details & cost
of his proposed establish-
ment. He has, apparently,
had sufficient time
to deal with this part
of the question - and
unless matters are
expedited little, if
anything, will be done
during the current official
year. Seeing that the
scheme of establishment
will require the sanction
of the Govt of India and
the Secretary of State.

L.S.

1 June 96

Wm. Ashpitt to Mr. Ashpitt
by the mail must be sent on

revised
the

C No 4013

C No 729

For orders.

The Presidency Port
Officer considers that
"the alterations to the
Saunders Lighthouse
should be commenced
without further delay -"
vide his letter no. $\frac{690}{74}$ to
d/29 April 76 received
with 80 1566w of 13 May 76.
Mr Ashpitel on the
other hand is of opinion
that there is no urgency
in the matter - vide the
concluding words of the
present letter.

This case seems to
point to the necessity
for a clear understanding
of the respective functions
of the Presidency Port
Officer and Mr Ashp.
if trouble & friction
to be avoided in the
future.

Speaking generally
the head of the S
the best judge
necessity for a
and the engine
the best means

26

K

27

28

29

30

effect to a measure. If
this principle be applied
in the present case, Mr.
Ashpitt will at once
suggest something practical
to improve the Chamber
Light.

N.S.
2 July 96

This motion for Chamber
has better be written
of Mr. Thos. Ashpitt
than this need here as
5th they can write what
to send in I would
in form of Chamber.

2/6/96

C No. 737

W
This is another case
of a difference of opinion
between the S. P. O. and
the Ashpitel. It might
be discussed with the
other papers awaiting
Commander Street?

N.S.
6 July 96

²²
C. No. 773

M

For favour of orders
whether the papers read
at the head of the draft
order should be printed.
It would be very convenient
for future reference.

L.S.

17 July 96

Jr
✓
17/7/96

Smith & Co
w. p. m. 96
since then received.
May 3/1896
With kind regards to the family
and all.

Wm. Smith

für Kolonialzeit
Ostasien

Lo No 62

Cis 2160

du

The CA. submission
estimate of No. 10139 for
dismantling the old
lighthouse column at
Madras. This was called
for in Sp. No. 303 W 57
24.1.96.

In memo No. 1084C
of 25.2.96. The S. B. I. office
was asked to submit
an estimate of the cost
of re-erecting the column
at Sacramento. This
must apparently be
awaited. For orders
incomparable whether
the present estimate
should be scrutinized

Account
Estimate
from
S. B. I.

at 11/12
12.3.96.

50/100 Cu
12/3/96

20 pending receipt
of order from S. B. I.
to memo No. 1084C
25.2.96 Cu

Marine Dept

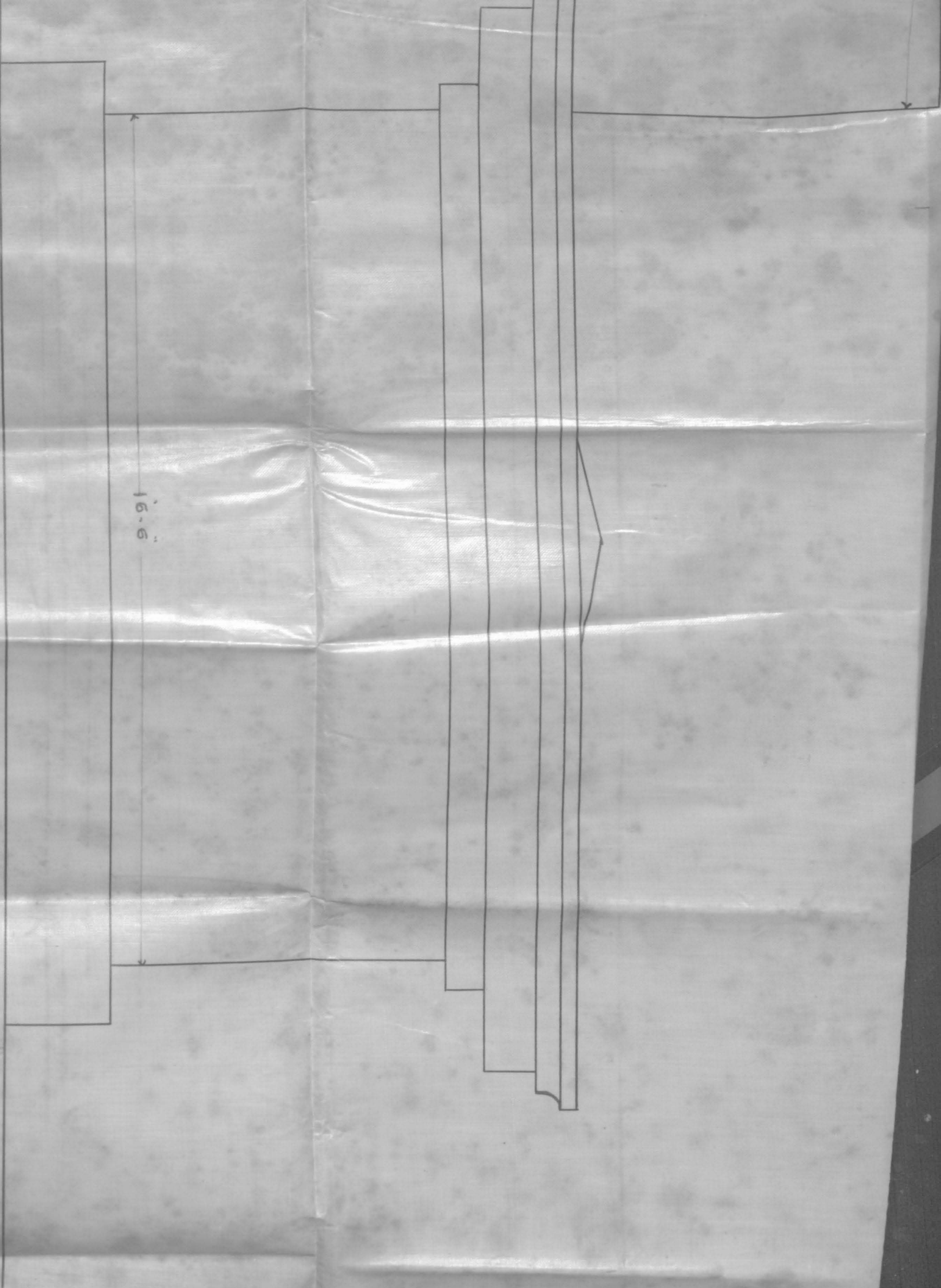
Memo.

The undersigned
has the honor to invite attention
to his Memo: N^o 282 E
dated 23rd May 1896 calling
for a statement shewing
the financial effect of
Mr. Ashpitel's proposals
in regard to the construction
and improvement of light
houses, and to request
that the required informa-
tion may be submitted
with the least possible
delay. The matter is one
of urgency and should
be so treated.

J
2/6/96

W
(Marine)

1051



W. L. Lawrence

26.2.96

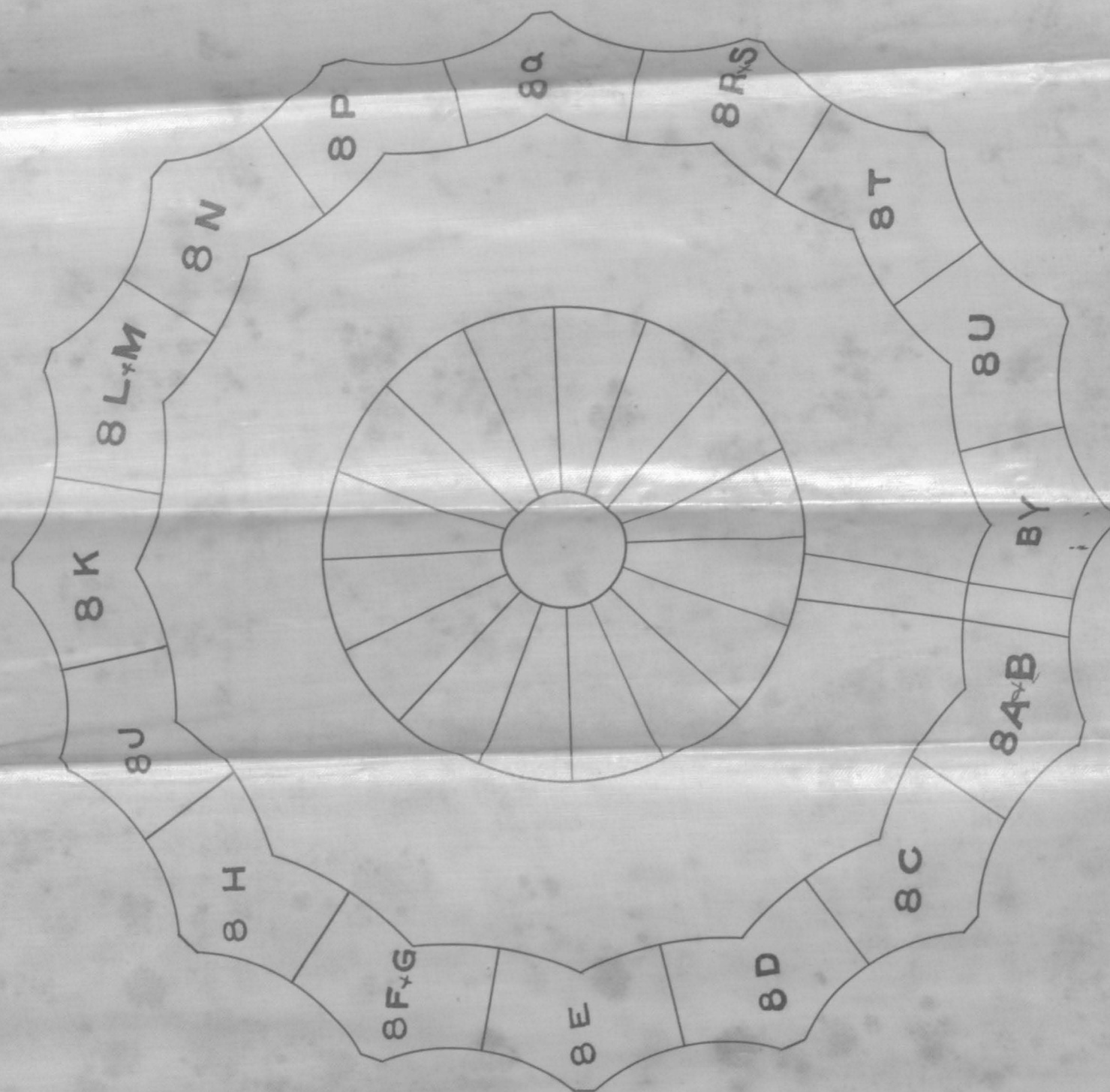
L.F. Co. R.E.

IN CHARGE CONSULTING ARCHITECT DIVISION

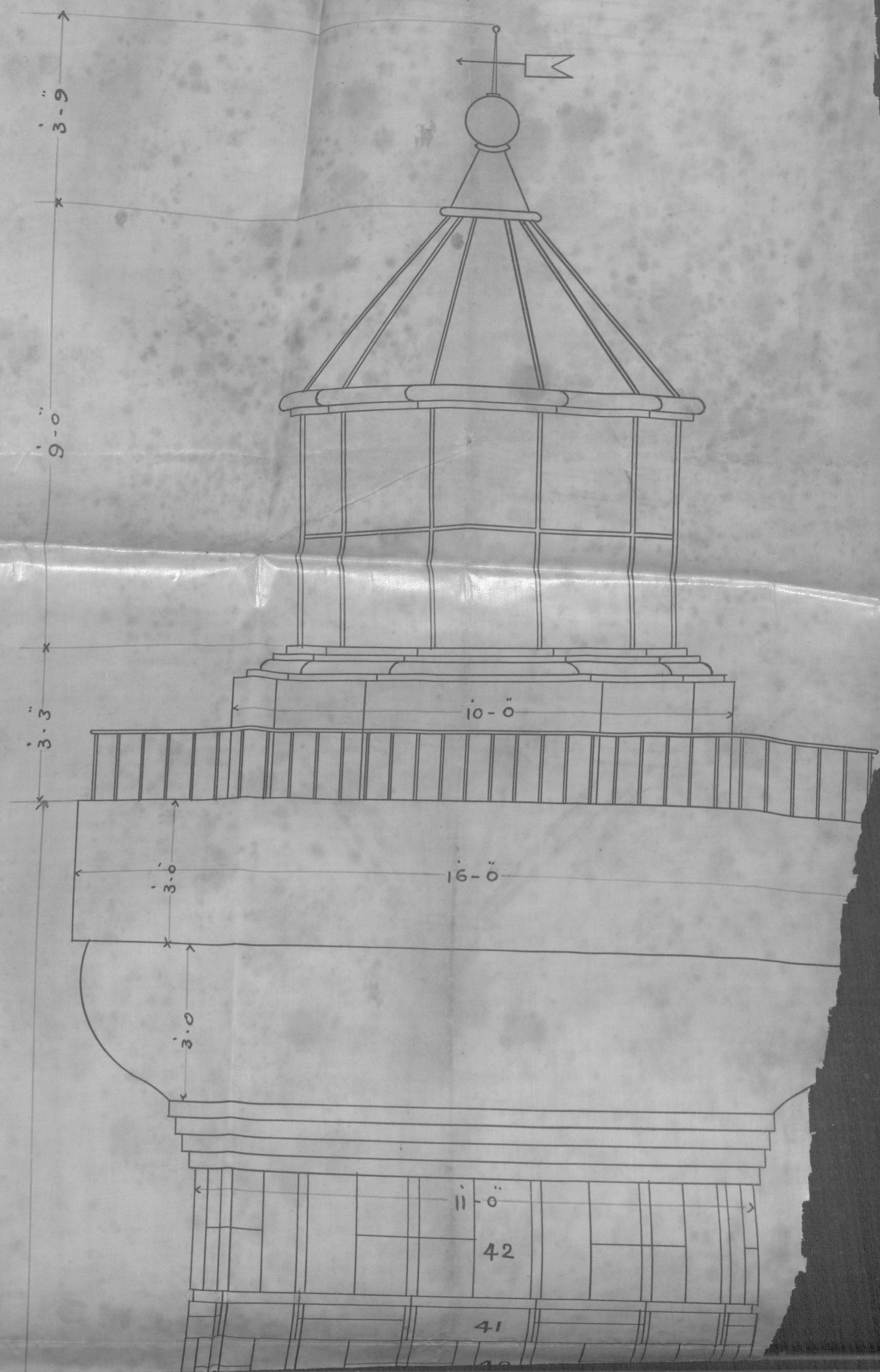
24TH FEBRUARY 1896.

REVISED 1958
SCHEDULE 64 DWH

PLAN OF COURSE No 8.



DRAWING OF THE OLD MADRAS LIGHT-HOUSE



39

38

37

36

35

34

33

32

31

30

29

28

27

26

25

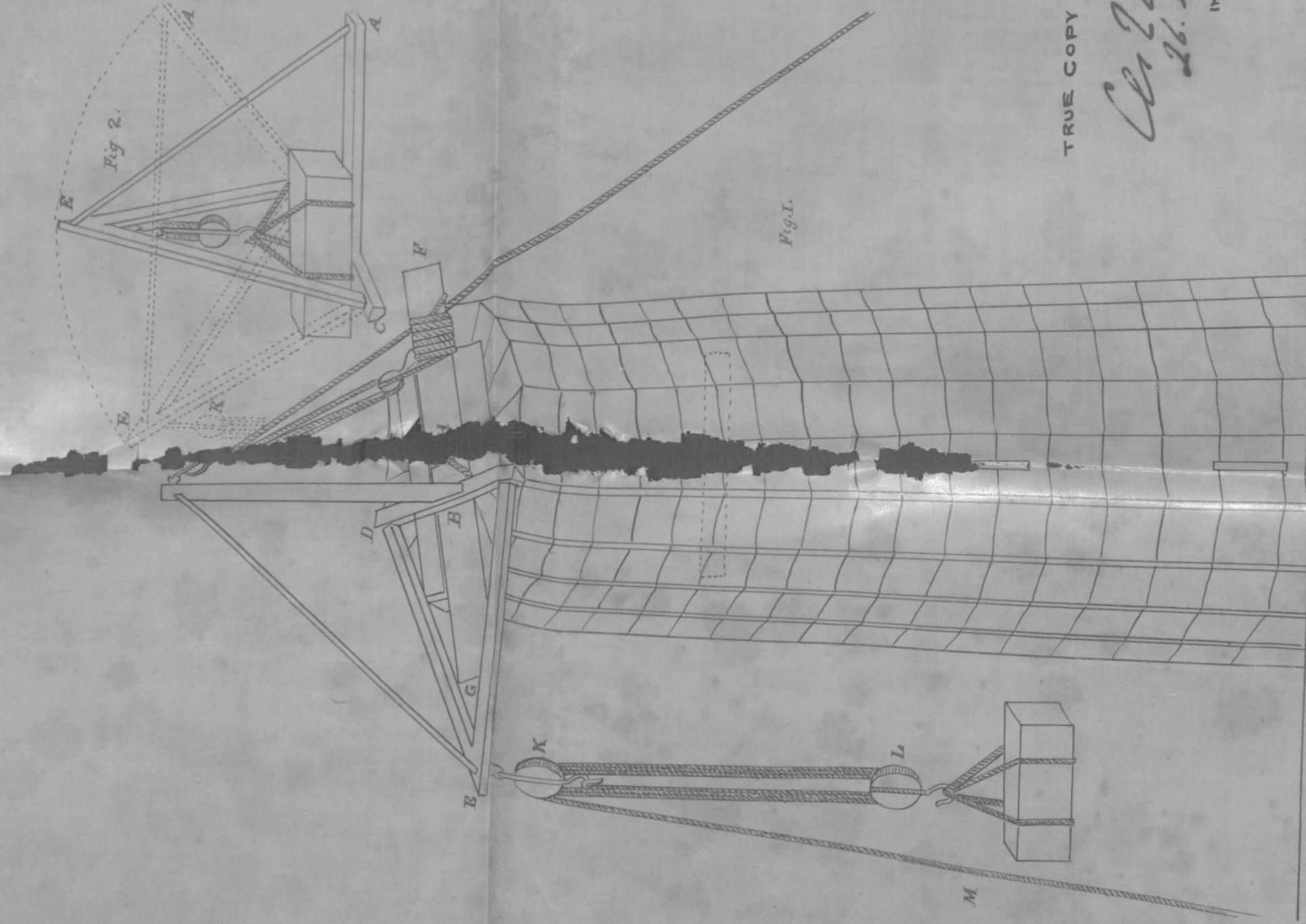
24

23

$$= \frac{1}{2}$$

				21					
				y 20					
				19					
				18					
				17					
				16					
				15					
				14					
				13					
				12					
				11					
				10					
				9					
E	D	C	A	8 v	U	T	R	S	
			B						
				7					
				6					

DRAWING OF A CRANE
USED ON THE CONSTRUCTION OF THE
MADIAS LIGHT HOUSE



TRUE COPY

Chas. L. Evans
26.2.96

Lt. Col. R.E.

IN CHARGE CONSULTING ARCHITECT
DIVISION

24TH FEBRUARY 1896

W. H. Stirling

478 Mar 24 7-96. Rm 83926-893.

[G
15]

Gobt. of 1896 Madras.
Final

To The Marine Dept

Proceedings, No. 412 dated 7th July 1896.

Subject.

Making certain alter-
ations in the appendix
to G.O. No 365-Final, of
2-6-96 against Port
& Marine funds & H.T.
fund Budget Estimates

NO. 784

1012 of 96
Not Back papers on the first

Removed from R.O.
692 mail
16-8-98
687
784
B

No 508 Marine 217 July 1896

Communicated
to the officers concerned
for information and
guidance

17/7/96

The P.P.O.
Ch H.T. Ba

Rev
H.S.C. corrected

DESPATCHED
28 JUL. 96

H.C. as } 1. into execution &
H.C. 0 } may carry them out
R.S.

2207

Financial Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper:-

From the Marine Department, dated 25th June 1896,
No. 330 E.

ORDER:- No. 412, dated 7th July 1896.

The entries "Presidency Port Officer" and
"Chairman, Harbour Trust Board", opposite items 195 and 196
on page 9 of G.O. No. 356, Financial, dated 2nd June 1896,
will be altered to "Marine Department" and the dates opposite
these items to the 20th February and the 15th March respective-
ly.

(True Extract)

W. D. Phillips

for Chief Secretary.

To

The Marine Department. ✓
,, Presidency Port Officer.
,, Chairman, Harbour Trust Board.

K R

first instance. Please
arrange to have the
statement issued
with the order of the
2nd June 1896 corrected,
so as to avoid confusion.

2. The Harbour Trust
Funds Estimates should
also, apparently, come
to the Marine Department,
but this has not been
prescribed. It might
now be done.

(Ed) J. S. G.

25.6.96

20. 374 on 27.5.96
" 196 on 17.1.96
" 842 on 28.10.95
" 602 on 20.8.95
" 470.71 on 22.6.95

No. 330 E of 25th June 1896

No. 330E

Government of Madras.

Marine
PUBLIC WORKS DEPARTMENT,

Ootacamund, 25 June 1896.

OFFICE NOTE.

From

*The Joint Secretary
Marine Deptt.*

To

*The Chief Secretary
Financial Department*

*G.O. No. 356 Financial
Dated 20 June 1896*

*The above G.O. provides
that the Port & Marine Fund
Budget estimates shall
be submitted direct to
the Financial Department
by the Presidency Port Officer.
vide page 9 of the Provis.
but in G.O. No. 1013 Financial
dated 14 December
1895, it is ordered that
these Estimates shall
come to the Marine
Department in the
first.*

G.O. No. 689
Recd 20-6-96

G.O. of {1896} Madras.
FINANCIAL.

Issued

Recd.

Encl.

G.O., No. 356, 2nd June 1896.

377 Mar
20-6-96

JUNE.

Budget Estimates.

Issuing orders regarding the submission of —
and drawing the attention of Secretariat Depart-
ments, &c., to the rules and procedure connected
therewith.

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—again the following papers :—

G.O., Nos. 470, 471, Financial, dated 22nd June 1895.
 " No. 602, Financial, dated 20th August 1895.
 " " 842 " " 28th October "
 " " 309 " " 2nd May 1896.

Copy submitted
Copy submitted
Copy submitted
N 377 man
22-V-96.

ORDER—No. 356, Financial, dated 2nd June 1896.

The attention of the departments of the Secretariat and of officers concerned is drawn to the procedure laid down in paragraphs 2 to 8 of G.O., No. 470, Financial, dated 22nd June 1895, in regard to the submission of budget estimates, and to the budget rules circulated with G.O., No. 602, Financial, dated 20th August 1895, as modified by G.Os., No. 842, Financial, dated 28th October 1895, and No. 309, Financial, dated 2nd May 1896. The Accountant-General will be requested to arrange for the forms referred to in paragraph 3 of G.O., No. 470, Financial, dated 22nd June 1895, being issued as early as possible.

2. In supersession of the instructions in paragraph 4 of G.O., No. 470, Financial, dated 22nd June 1895, the estimates against which an asterisk is placed in the appendix to this order will be printed by the Board of Revenue and heads of departments at the Government Press and submitted to Government in print.

3. The dates on which the estimates are due in the Financial Department are shown in the appendix to these proceedings. The following alterations have been made :—

	Due under G.O., No. 470, Finan- cial, dated 22nd June 1895.	Date as now altered.
20-A. Presidency Police	1st October.	8th October.
20 B to F. District and other Police		
24-G. Chemical Examiner		
3-A. Charges of District Administration	15th November.	8th November.
3-B. Charges on account of Fishery collections.		
3-C. Survey		
3-C. Settlement		
3-D. Land Records and Agriculture		
3-E. Inam Department		
5-A and 5-B. Salt		
6-A to 6-C. Stamps	15th November.	1st December.
7. Excise		
9-A and 9-B. Customs		
10-A. Assessed Taxes		
I-A and I-B. Land Revenue		

4. In the case of several budget estimates received last year the charges under 1. Refunds, 30. Stationery and Printing—Printing at Private presses, Stationery purchased in the country, were not shown separately as directed in rules 52 and 53 of the rules circulated with G.O., No. 602, dated 20th August 1895; nor were rules 37 and 38, requiring information in regard to the actuals of the first five or six months in the case of receipts and of three years in the case of charges, observed in all cases. Explanations of variations were not, moreover, always complete or satisfactory. Every endeavour should be made to render the estimates about to be submitted for the ensuing year as complete as possible. Estimates will be returned for revision in all cases in which the rules as regards their preparation have been infringed.

(True Extract.)

Chief Secretary.

To the Accountant-General.
 " Departments of the Secretariat.
 " Board of Revenue (all Departments).
 " Heads of Departments under the Chief Secretary.
 " Public Department (with reference to Appendix).
 Copy to the Comptroller and Auditor General.

Appendix to G.O., No. 356, Financial, dated 2nd June 1896.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
			REVENUE AND RECEIPTS.			
			IMPERIAL AND PROVINCIAL.			
1	I A, I B	I A, I B	Land Revenue*	Revenue Department (Board of Rev., Land Rev.)†	1st December.	
2	III A to III D	III A to III D	Salt*	Do.	1st do.	
3	IV A to IV E	IV A to IV E	Shamps*	Do.	15th November.	
4	V A and V B	V A and V B	Excise*	Do.	1st December.	
5	VII A to VII D	VII A to VII D	Customs*	Do.	15th November.	
6	VIII A	VIII A	Assessed taxes*	Do.	do.	
7	IX A to IX C	IX A to IX C	Forest*	Do.	1st December.	
8	X A and X B	X A and X B	Registration*	Inspector-General of Registration	1st November.	
9	XI	XI	Tributes from Native States*	Accountant-General (Miscellaneous Budget)	25th do.	
10	XII A to XII C	XII A to XII C	Interest on Imperial loans*	Do.	25th do.	
11	XII D	XII D	Interest on Provincial loans, Class I*	Revenue Department (Board of Rev., Land Rev.)	15th do.	
12	XII D	XII D	Do.	Accountant-General—(Miscellaneous Budget)	25th do.	
13	XVI A (a to c)	XVI A (a to c)	Post Office	Postmaster-General	15th September.	
14	XVI A	XVI A	Law and Justice—Courts of Law*	High Court	15th November.	
15	XVI B (a and b)	XVI B (a and b)	Law and Justice—Jails*	Inspector-General of Prisons	1st do.	
16	XVII A	XVII A	Presidency Police*	Commissioner of Police, Madras	1st do.	
17	XVII B and C	XVII B and C	District and other Police*	Inspector-General of Police	1st do.	
18	XVII B	XVII B	Cattle Pounds*	Revenue Department (Board of Rev., Land Rev.)	15th do.	
19	XVII B	XVII B	Inspection of Boilers	Public Works Department	15th do.	
20	XVIII	XVIII	Marine*	Revenue Department (Board of Rev., Land Rev.)	15th do.	
21	XIX A to XIX F	XIX A to XIX F	Education*	Director of Public Instruction	15th October.	
22	XX	XX	Medical*	Surgeon-General	15th do.	
23	XX A	XX A	Contributions from Municipalities	Sanitary Engineer	15th do.	
24	XXI A	XXI A	Botanical gardens	Revenue Department (Government Botanist)	15th November.	
25	XXI A	XXI A	Veterinary and Stallion receipts	Do.	15th do.	
26	XXI A	XXI A	Munro's Park in Gooty	Collector of Anantapur	15th September.	
27	XXI A	XXI A	Old College Park, Madras	Director of Public Instruction	15th do.	
28	XXI B	XXI B	Cinchona Plantations	Revenue Department (Director of Cinchona Plantations)	15th November.	

* To be submitted in print.

† The forms should be supplied to the Heads of Departments shown within parenthesis.

Appendix to G. O., No. 356, Financial, dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
REVENUE AND RECEIPTS—cont.						
IMPERIAL AND PROVINCIAL—cont.						
29	XXI	XXI C	Experimental cultivation ..	Revenue Department (Board of Rev., Rev. Sett.)	15th November.	
30	XXI	...	Public Exhibition and Fairs ..	Do. (Miscellaneous Budget)	15th do.	
31	XXI	...	Miscellaneous ..	Accountant-General (Miscellaneous Budget)	25th do.	
32	XXI	XXI D	Emigration to British Colonies ..	Protector of Emigrants ..	15th September.	
33	XXI	XXI D	Emigration to French Colonies ..	British Consular Agent, Pondicherry & Karikal.	15th do.	
34	XXI	...	Inland Labour Transport fees ..	Collector of Ganjam ..	15th do.	
35	XXI	...	Examination fees (Government Examinations) ..	Commissioner of Government Examinations ..	15th do.	
36	XXI	XXI E	Do. (Examinations of Assistants) ..	Board of Examiners ..	15th do.	
37	XXI	XXI E	Do. (Provincial Civil Service) ..	Director of Public Instruction ..	15th do.	
38	XXI	XXI E	Do. (Village Officers' Special Tests) ..	Revenue Department (Board of Rev., Land Rev.)	15th November.	
39	XXI	XXII A and B	Superannuation allowance and pensions ..	Accountant-General ..	15th do.	
40	XXI	XXII A	Contributions for pensions ..	Political Agent, Pudukkottai ..	15th do.	
41	XXII	XXII A	Stationery ..	Superintendent of Stationery ..	15th do.	
42	XXII	XXIII A and C	Government Press ..	Superintendent, Government Press ..	15th do.	
43	XXII	XXIII B	Printing Judgments ..	High Court ..	15th November.	
44	XXII	XXIII B and C	Collectors' Presses ..	Revenue Department (Board of Rev., Land Rev.)	15th do.	
45	XXV	XXV A to E	Miscellaneous items ..	Accountant-General (Miscellaneous Budget)	25th do.	
46	XXV	XXV D	Stamping weights and measures ..	Revenue Department (Board of Rev., Rev. Sett.)	15th do.	
47	XXV	XXV D	Births, Deaths and Marriages Registration fees ..	Inspector-General of Registration ..	1st do.	
48	XXV	XXV E	Sale-proceeds of skins of wild animals ..	Rev. Dept. (Board of Revenue, Land Revenue)	15th do.	
49	XXVI	...	State Railways—Gross traffic receipts ..	Public Works Department, Railway Branch ..	15th do.	
50	XXX	XXX A	Minor Works and Navigation—Civil ..	Revenue Department (Board of Rev., Rev. Sett.)	15th do.	
51	XXX	XXX B	Do. do. ..	Public Works Department, Irrigation Branch ..	30th do.	
52	XXXII	XXXII A	Civil Works—Civil ..	Accountant-General (Miscellaneous Budget)	25th do.	
53	XXXII	XXXII B	Do. P. W. D. ..	Public Works Department, General Branch ..	30th do.	
EXPENDITURE.						
IMPERIAL AND PROVINCIAL.						
54	2	2 A to C	Assignments and Compensations ..	Accountant-General ..	15th October.	
55	3	3 A	Charges of District Administration ..	Revenue Department (Board of Rev., Land Rev.)	8th November.	
56	3	3 B	Charges on account of Fishery collections ..	Do. (Supl. of Revenue Survey)	8th do.	
57	3	3 C	Survey ..	Do. (Board of Rev., Rev. Sett.)	8th do.	
58	3	3 C	Settlement ..	Do. (Inam Commissioner)	8th do.	
59	3	3 D	Land Records and Agriculture ..	Do. do.	8th do.	
60	3	3 E	Inam Department ..	Do. do.	8th do.	

* To be submitted in print.

N.B.—Charges under the following heads should be shown separately in each budget.

1. Refunds and Drawbacks.

30. Stationery and Printing.

Printing at Private presses.

Stationery purchased in the country.

Appendix to G. O., No. 356, Financial dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
EXPENDITURE—cont.						
IMPERIAL AND PROVINCIAL—cont.						
61	3	5 A and 5 B	Salt ..	Revenue Department (Board of Rev., Sept. Rev.)	8th November.	
62	3	6 A to 6 C	Stamps ..	Do. do.	8th do.	
63	7	...	Excise ..	Do. do.	8th do.	
64	9	9 A and 9 B	Customs ..	Do. do.	8th do.	
65	10	10 A	Assessed Taxes ..	Do. do.	8th do.	
66	11	11 A and 11 B	Forest ..	Do. (Board of Rev., Land Rev.)	1st December	
67	12	12 A and 12 B	Registration ..	Inspector-General of Registration ..	1st October.	
68	13	13 A	Interest—Provincial ..	Revenue Department (Board of Revenue, Revenue Settlement)	15th November.	
69	13	13 A	Do. do. }	Accountant-General (Miscellaneous Budget)	25th do.	
70	14	...	Interest—Imperial ..	Postmaster-General ..	15th do.	
71	15	15 A	Post Office—District Post Establishments ..	Accountant-General (Miscellaneous Budget)	15th September.	
72	18	18 A to 18 C	General Administration, Imperial ..	Military Secretary to H.E. the Governor	25th November.	
73	18	18 D	Salary, Contract Allowance, Staff and household of H.E. the Governor.	Do. do.	15th do.	
74	18	18 D	H.E. the Governor's Band ..	Do. do.	15th do.	
75	18	18 E	Travelling expenses ..	Do. (Controller of Military Accounts)	15th do.	
76	18	18 E	Camp equipage ..	Do. do.	15th do.	
77	18	18 F to 18 H	Executive Council ..	Chief Secretary to Government ..	30th do.	
			Legislative Council ..	Do. do.	15th do.	
			Civil Secretariats—Public Department ..	Do. do.	15th do.	
			Other Establishments and services ..	Do. do.	15th do.	
78	18	18 H	Translator's Department ..	Tamil Translator to Government ..	15th do.	
79	18	...	...	Telugu do. do.	15th do.	
80	18	...	...	Malayalam do. do.	15th do.	
81	18	...	...	Canarese do. do.	15th do.	
82	18	...	...	Persian and Hindustani Translator to Govt. ..	15th do.	
83	18	...	...	Secretary to Government, Revenue Department ..	30th do.	
84	18	...	...	Chief Secretary to Government ..	30th do.	
85	18	18 A	Civil office of Account and Audit—Provincial—Local and Municipal Department ..	Accountant-General ..	15th do.	

* To be submitted in print.

Appendix to G.O., No. 356, Financial dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
EXPENDITURE—cont.						
IMPERIAL AND PROVINCIAL—cont.						
86	18	18 J	Board of Revenue (General Administration) *	Revenue Department (Board of Rev., Land Rev.)	15th November.	
87	19 A	19 A (a to g)	Law and Justice—Courts of Law *	High Court	15th do.	
88	19 B	19 B (a and b)	Law and Justice—Jails *	Inspector-General of Prisons	1st October.	
89	20	20 A	Presidency Police *	Commissioner of Police	8th do.	
90	20	20 B to F	District and other Police *	Inspector-General of Police	8th do.	
91	20	20 G	Cattle Pounds *	Revenue Department (Board of Revenue, Land Revenue)	15th November.	
92	20	20 H	Inspection of Steam Boilers	Public Works Department	15th do.	
93	21	21 A	Salaries and allowances of officers and men afloat *	Revenue Department (Board of Revenue, Land Revenue)	15th do.	
94	21	21 B and C	Purchase and hire of ships and vessels *	Revenue Department (Board of Revenue, Land Revenue)	15th do.	
95	22	22 A to I	Marine Establishment and Miscellaneous	Revenue Department (Board of Revenue, Land Revenue)	15th do.	
96	23	23 A	Education *	Director of Public Instruction	15th do.	
97	23	23 A	Church of England	The Accountant-General	15th do.	
98	23	23 A	Church of Scotland	Senior Chaplain of the Church of Scotland	15th do.	
99	23	23 B	Petty construction and repairs of Churches and Cemetery establishments.	The Venerable the Archdeacon	15th do.	
100	23	23 A	Capitation allowances	Accountant-General (Miscellaneous Budget)	26th November.	
101	24	24 A, B, D, E and F	Roman Catholic Archbishop	Surgeon-General	15th do.	
102	24	24 C	Medical establishment, &c. *	Sanitary Commissioner	15th do.	
103	24	24 C	Sanitation and Vaccination *	Sanitary Engineer	15th do.	
104	24	24 G	Engineering Department	Chemical Examiner	15th do.	
105	25	25 A and B	Refugees and State Prisoners and Miscellaneous *	Accountant-General (Miscellaneous Budget)	26th November.	
106	25	25		Resident, Travancore and Cochin	15th September.	
107	25	25		Political Agent, Cuddalore	15th do.	
108	25	25		Political Agent, Kurnool	15th do.	
109	25	25		Stipend Pay office, Vellore (Collr., North Arcot).	15th do.	
110	25	25		Paymaster, Carnatic Stipends	15th do.	
111	25	25		British Consular Agent, Pondicherry, &c.	15th do.	
112	25	25		Government Agent, Tanjore	15th do.	
113	25	25		Political Agent, Pudukkottai	15th do.	
114	26	26 A	Veterinary and Stallion charges	Revenue Department (Board of Revenue, Revenue Settlement)	15th November.	
115	26	26 B	Archaeological Department	Government Epigraphist	15th do.	
116	26	26 B		Superintendent, Archeological Survey	15th do.	

* To be submitted in print.

Appendix to G.O., No. 356, Financial, dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
EXPENDITURE—cont.						
IMPERIAL AND PROVINCIAL—cont.						
117	26	26-C	Provincial Museums	Revenue Department (Superintendent, Government Central Museum)	15th November.	
118	26	26	Imperial Institute	Do.	15th do.	
119	26	26	Inspector of Factories	Surgeon-General	15th do.	
120	26	26	Public Observatories	Government Astronomer	15th do.	
121	26	26-E	Donations to Scientific Societies	Honorary Secretary, Fine Arts Society	15th do.	
122	26	26-F	Experimental Cultivation	Revenue Department (Board of Rev., Rev. Sett.)	15th do.	
123	26	26-G	Cinchona Plantations *	Do. (Director)	15th do.	
124	26	26	Public Exhibitions and Fairs	Do. (Board of Rev., Rev. Sett.)	15th do.	
125	26	26	Botanical Gardens *	Do. (Government Botanist)	15th do.	
126	26	26	Zoological Collections in the People's Park	President, Municipal Commission	15th do.	
127	26	26	Munro's Park in Coorg	Collector of Anantapur	15th do.	
128	26	26	Other Public Parks, Madras	Director of Public Instruction	15th do.	
129	26	26	Agri-Horticultural Society	Revenue Department (Government Botanist)	15th do.	
130	26	26	Emigration to British Colonies	Honorary Secretary, Agri-Horticultural Society	15th do.	
131	26	26	Do. to Straits Settlements	Collector of Emigrants	15th do.	
132	26	26	Do. to French Colonies	Collector of Tanjore	15th do.	
133	26	26	Inland Labour Transport	British Consular Agent, Pondicherry and Karikal	15th do.	
134	26	26	Registration of Land Trade	Revenue Department (Board of Rev., Rev. Sett.)	15th do.	
135	26	26	Do. of Sea-borne Trade	Do.	15th do.	
136	26	26	Do. of Rail-borne Trade	Inspector-General of Registration	15th do.	
137	26	26	Do. of Births, Deaths and Marriages	Revenue Department (Board of Rev., Rev. Sett.)	15th do.	
138	26	26	Do. of Births and Deaths	Do.	15th do.	
139	26	26	Do. of Rain Gauges	Secretary to Government, Revenue Department	15th do.	
140	26	26	District Manuals	Board of Examiners	15th do.	
141	26	26	Government Examinations *	Director of Public Instruction	15th do.	
142	26	26	Examination of Assistants	Government Agent, Tanjore	15th do.	
143	26	26	Provincial Civil Service Examination	Paymaster, Carnatic Stipends	15th do.	
144	26	26	Territorial and Political Pensions, Tanjore	Political Agent, Kurnool	15th do.	
145	27	27-A	Do. do.	Collector of Kistna	15th do.	
146	27	27-A	Do. do.	Do. of Ganjam	15th do.	
147	27	27-A	Do. do.	Do. of Vizagapatam	15th do.	
148	27	27-A	Do. do.	Do. of North Arcot	15th do.	
149	27	27-A	Do. do.	Accountant-General	15th do.	
150	27	27-A	Do. do.	Do.	15th do.	
151	27	27-A	Do. do.	Do.	15th do.	
152	27	27-A	Do. do.	Do.	15th do.	
153	27	27-A	Do. do.	Do.	15th do.	
154	27	27	other Political Pensions, Charitable allowances	Do.	15th do.	
155	28	28	Civil Furlough and Absentee Allowance *	Do.	15th do.	
156	29	29-A	Superannuation Allowances and Pensions	Do.	15th do.	

* To be submitted in print.

Appendix to G.O., No. 356, Financial, dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
EXPENDITURE—cont.						
IMPERIAL AND PROVINCIAL—cont.						
157	30 ..	30 A	Stationary office at the Presidency, &c.* ..	Superintendent of Stationary	15th September.	
158	30 ..	30 C	Secretariat Press* ..	Superintendent, Government Press	15th do.	
159	30 ..	30 C	Collectorate Presses ..	Board of Revenue, Land Revenue	15th November.	
160	30 ..	30 D	Settlement Registers ..	Revenue Department (Board of Rev., Rev. Sett.).	15th do.	
161	30 ..	30 D	Trade and Navigation Returns ..	Do. (do.)	15th do.	
162	32 ..	..	Allowances and Rewards for Examinations	Board of Examiners ..	15th September.	
163	32 ..	..	Petty Establishments (stamping weights and measures).	Revenue Department (Board of Rev., Rev. Sett.).	15th November.	
164	32 ..	..	Petty (Bungalow) Establishments* ..	Accountant-General (Miscellaneous Budget)	25th do.	
165	32 ..	32 D	Pearl Fishery ..	Revenue Department (Board of Rev., Land Rev.).	15th do.	
166	32 ..	32 A	Donations for Charitable Purposes* ..	Accountant-General (Miscellaneous Budget)	25th do.	
167	32 ..	32 A	Triplacane Langerkhana ..	Commissioner of Police, Madras ..	15th September.	
168	32 ..	32 A	Monegar Choultry ..	Secretary, Monegar Choultry	15th do.	
169	32 ..	..	Remittance of Treasure ..	Revenue Department (Board of Rev., Land Rev.).	15th November.	
170	32 ..	..	Rewards for Destruction of Wild Animals	Do. (do.)	15th do.	
171	32 ..	..	Up-keep of the newly-built stables and of the latrine for Hindu clerks	Garrison Quartermaster ..	15th do.	
172	32 ..	..	Contributions for Telegraph Lines, &c. ..	Superintendent of Telegraphs	15th September.	
173	32 ..	..	European Vagrants (Government Workhouse) ..	Commissioner of Police	15th do.	
174	32 ..	32 B	Fire, Flood and Epidemic charges	Revenue Department (Board of Rev., Land Rev.).	15th November.	
175	32 ..	..	Other Miscellaneous charges (Imperial and Provincial)*	Accountant-General (Miscellaneous Budget)	25th do.	
176	37 ..	..	Máyavaram-Muttupet Railway—Construction charges.	Public Works Department (Railway)	15th do.	
177	38 ..	..	Do. do. Working charges ..	Do. (do.)	15th do.	
178	41 ..	..	Miscellaneous Railways ..	Do. (do.)	15th do.	
179	43 ..	..	Irrigation and Navigation Charges—Public Works Department.	Do. (Irrigation)	15th do.	
180	43 ..	..	Irrigation and Navigation charges—Civil	Revenue Department (Revenue Settlement)	15th do.	
181	45 ..	..	Civil Works—Agency, Ganjam ..	Agent to Governor, Ganjam	15th September.	
182	45 ..	..	Do. Agency, Vizagapatam ..	Do. Vizagapatam	15th do.	
183	45 ..	..	Do. Agency, Gódvári ..	Government Agent, Gódvári	15th do.	
184	45 ..	..	Do. Municipal Works (Water-supply and Drainage).	Local and Municipal Department	15th October.	
185	45 ..	..	Do. Miscellaneous Public Improvements.*	Accountant-General (Miscellaneous Budget)	25th November.	
186	45 ..	..	Do. Public Works Department ..	Public Works Department (General)	15th do.	
187	..	..	Provincial Loan and Advances (Municipal)	Local and Municipal Department	15th October.	
188	..	..	Do. do. (Revenue)	Revenue Department (Settlement)	15th November.	

* To be submitted in print.

Appendix to G.O., No. 356, Financial, dated 2nd June 1896—cont.

Serial number of budget estimates.	Number of Major Head of account.	Number of Detailed Account.	Name of budget estimate.	Department or head of department submitting the budget to the Financial Department.	Date of submission of budget to the Financial Department.	Remarks.
1	2	3	4	5	6	7
EXPENDITURE—cont.						
INCORPORATED LOCAL FUNDS.						
189	..	..	Local Funds—	Accountant-General	1st December.	
190	..	..	Act V of 1884 and Adjusting heads* ..	Revenue Department (Land Revenue)	15th November.	
191	..	..	Village Service Fund* ..	Do. (Settlement)	15th do.	
192	..	..	Irrigation Cess Fund* ..	Government Agent, Gódvári	15th September.	
193	..	..	Bhudrábham and Rekappalle Road Fund ..	Local and Municipal Department	15th October.	
194	..	..	Tanjore Railway Guarantee Fund ..	..	..	
CONSOLIDATED CIVIL BUDGET ESTIMATES* ..						
195	..	..	EXCLUDED LOCAL FUND, ETC.	Accountant-General	15th January.	
196	..	..	Port and Marine Funds ..	..	..	
197	..	..	Harbour Trust Funds ..	..	..	
197	..	..	Lawrence Asylum Press ..	..	..	
21st January. 20th Feb. 21st February. 15th March. 1st December.						

* To be submitted in print.

Gobt. of {1896} Madras.
FINANCIAL.

Issued

Recd.

Encl.

G.O., No. 356, 2nd June 1896.

JUNE.

Budget Estimates.

Issuing orders regarding the submission of —
and drawing the attention of Secretariat Depart-
ments, &c., to the rules and procedure connected
therewith.

MAINE G. No. 689
Recd 20-6-96

capital should also be
fully stated, and it should
be explained how it is
intended to meet the
extra charge for interest
on the loan of 10 lakhs
pending the issue of
debentures.

17/7/96
m

CS

478 mar 24 7-96. Rm 838 26-5-93.
368 a 22-5-96. u 84 22-4-92
276 22 16-5-96. 542 Jul 24-7-91.
281 mar 27-4-96. 487 u 20-6-91.
226 mar 1-4-96. *Urgent*
210 mar 26-3-96. 314 Jul 25-5-91.
153 a 9-3-96. 313 u 29-5-91.
116 22 4-3-96. 280 u 20-4-91.
119-20 mar 26-2-96. Rm 319 mar 6-11-89.
162 2 15-1-96. u 253 a 2-9-89.
952 Jul 24-12-95. 361 Jul 10-6-89.
361 mar 24-12-95. Rm 174 mar 18-6-89.
270 mar 24-9-95. Madras Act II of 1886
142 mar 23-5-95
1108 W. 26-7-95. 9-5-95 Dec: 46105: 20-8-96
366 Rm 57 17-5-95
u 55 10-5-95
285 Jul 2 30-3-95
Rm 7 17-1-95
866-67 Jul 22-10-94.
792 u 27-9-94.
Rm 134 mar 26-7-94.
u 114 u 26-6-94
u 152 A u 19-8-93.

new copies

No. 50 year 2 14 July 1896

B Gm

DESPATCHED
22 JUL 96

Chairman A. J. B.

Mar 1897 72
cont 57

23/7

15/10/96

689
Marine

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Endorsement in the Financial
Dept on letter from the Govt
of India, Finance & Commerce
Dept. No. A/2948 d/7 July 1896. (H.E. No. 1397 d/15 July 96)

* Reply to Finl. letter No. 318 dated 3-5-96. (vide No. 368 dated 22-5-96)

No. 507 Marine 7/7 July 1896

Communicated
to the Chairman Harbour
Trust Board who will
furnish the required details
as to the works for which
the loan is required, having
in view the modifications
of the budget programme
since found necessary.
The reasons in support of
the proposed charges to