

GENERAL RECORD DEPARTMENT.

Paper taken out of the Records from
charge of the Record-keeper.

Department

E. M. C., or G. O., No.

Desp. from or to England, No.

Volume General No.

Date

To whom given

For Current No.

189

Department.

When taken out

Initials.

W. S. Brown

Q.

To wait for
C. N. B. arrival? 7/7/82

Result. $\frac{12}{13/1}$ $\frac{12}{5/10}$ $\frac{12}{13/1}$

10 Still
13-1-83 Cu

Dr. W

I do not feel
sure that either
the Regular Est.
in current or the
ordinary Est. for
81-82 are given
correctly with reference
to the late volume in
reference to the pro-
bable entry in the
Retirement (roughly
estimated at 1,28,000
?) and compensation
claims north of
Harbour

Perhaps it
will be as well
to send a line
to Mr. Thompson

regard to the
matter - If he
was found the
Est. in Suff. detail
and can say how
much he is likely
to spend out of it.
this year will be
good

Att

18-12-80
No 631 N.

Sup at Mr. H. W.

Please find
this information -

L. 10/2

DW.

The upper of these
two files has been
in the "Lie Over" box
for over three years,
& it is proposed now
to bring the papers
formally on record
so as to remove
them from the "L.O."
list.

The aspect of
the question has been
entirely altered by
the partial destruction
of the Harbour,
& the notes in the
file are now of
no use.

The question of
interest will doubtless
be settled hereafter
in connection with
matters dealt with
in second file.

Small disposal minutes

initials - C

in 22/12 & 27/12

Good to go
and back to
the 12

How do you feel?

the system of the
the first of the
the second of the
the third of the
the fourth of the
the fifth of the
the sixth of the
the seventh of the
the eighth of the
the ninth of the
the tenth of the

the first of the
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the eighth of the
the ninth of the
the tenth of the

No 2948W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 28th Decr 80

Read the following:—

From The Sup^{le}, Madras } (H.E. No 59 Wd/26th Nov/80)
Harbour Works }

— do — do — (" " 64 W " 6th Decr/80)

— do — do — (" " 68 W " 7th " ")

Office Note from the Ex^{ce} P.W. Accts (" " 884 — 13th " ")

— do — Sup^{le}, M. W. Works (" " 17th " ")

Ordered that
the Budget Estimate
of the Madras Harbour
Works for 1881-82 be
forwarded to the Govt.
of India.

H.E. No 2948 Wd/28th Decr 80

Forwarded
accordingly.

Ex^{ce} P.W. Accounts ✓
Sup^{le}, M. W. Works ✓
7-1-81
R.P.

20/12/80

7771

1880

Govt. of (1879) Madras.

PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O., 28 Decr 1880, No. 2948 Wd

Nos.

Budget Estimate of the
M. W. Works for 1881-82
forwarded to the Govt.

Budget Estimate of the
M. W. Works for 1881-82

28
2

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1880) Madras.
PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated December, 28th

Issued

Recd.

Encl.

G. O., 28th December 1880, No. 2,948-A W.

DECEMBER.

Nos. 94-96.

BUDGET Estimate of the Madras Harbour
Works for 1881-82.

10/12/80

10/12/80

21/12/80

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

28th December 1880, No. 2,948 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

- No. 94. From the Superintendent, Madras Harbour Works, dated 26th November 1880, No. 59 W.
- No. 94-A. From the Superintendent, Madras Harbour Works, dated 6th December 1880, No. 64 W.
- No. 94-B. From the Superintendent, Madras Harbour Works, dated 7th December 1880, No. 68 W.
- No. 94-C. Office Note from the Examiner of Public Works Accounts, dated 13th December 1880, No. 884.
- No. 94-D. Office Note from the Superintendent, Madras Harbour Works, dated 17th December 1880.

No. 95. ORDER THEREON, 28th December 1880, No. 2,948 W.

ORDERED that the Budget Estimate of the Madras Harbour Works for 1881-82 be forwarded to the Government of India.

(True Extract.)

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

To the Examiner of Public Works Accounts.
„ Superintendent of Madras Harbour Works.

No. 96. (DOCKET No. 2,948-A W., dated 28th December 1880).

FORWARDED accordingly.

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

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

28th December 1880, No. 2,948 W.

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„ Superintendent of Madras Harbour Works.

No. 96. (DOCKET No. 2,948-A W., dated 28th December 1880).

FORWARDED accordingly.

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

Exd. J. W. Fischer.
Spare Copies

BUDGET-ESTIMATE OF EXPENDITURE ON THE HARBOUR WORKS IN
MADRAS DURING 1881-82.

PART I—SECTION A.

	Budget Estimate, 1881-82.	Original Budget Estimate, 1880-81.	Modified Budget Estimate, 1880-81.	Original Budget Estimate, 1879-80.	Modified Budget Estimate, 1879-80.	Outlay, 1878-79.	Outlay, 1877-78.
Original Works	RS. 2,95,804	RS. 10,65,856	RS. 14,03,086	RS. 7,00,000	RS. 8,00,000	RS. 7,78,030	RS. 3,95,196
Repairs .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Establishment	59,443	53,144	53,144	45,000	50,000	53,020	48,080
Tools and Plant	5,000	11,000	11,000	5,000	5,000	4,770	1,01,892
Suspense	18,000	70,000	70,000	1,00,000	1,85,000	96,000	1,09,581
Total ..	3,78,247	12,00,000	15,37,230	8,50,000	10,40,000	9,31,820	6,54,749

Payments in India ..	..	..	..	..	..	RS. 3,70,247
Do. in England ..	..	..	..	..	..	8,000
						3,78,247

— December 1880.

(Signed) F. N. THOROWGOOD,
Superintendent, Madras Harbour Works.

GOVERNMENT OF MADRAS.

PART III.

DETAIL of the Budget-Estimate for Establishment for the Harbour Works in Madras for 1881-82.

NUMBER.		Particulars.	Salary of Office.	ESTIMATE FOR 1881-82.				
1880-81.	1881-82.			Per Mensem.	For 6 Months.	For 9 Months.	For 12 Months.	Total.
		DIRECTION.	RS.	RS.	RS.	RS.	RS.	RS.
		ENGINEER ESTABLISHMENT.						
1	1	Engineer in Chief ...	...	...	...	...	5,000	5,000
1	1	Total Direction ...	...	...	...	...	5,000	5,000
		CONSTRUCTION.						
		ENGINEER ESTABLISHMENT.						
1	1	Superintendent of Works ...	1,250	1,250	...	...	15,000	
1	1	Assistant Superintendent ...	700	700	...	...	8,400	
2	2	Total ...	...	...	...	...	23,400	23,400
		UPPER SUBORDINATE ESTABLISHMENT.						
1	1	Sub-Engineer ...	400	400	...	...	4,800	
...	1	Foreman of Works ...	400	400	...	...	4,800	
...	1	Mechanical Engineer ...	300	300	1,800	...	...	
1	1	Superintendent of Quarries ...	250	250	...	2,250	...	
1	1	Accountant ...	160	160	...	...	1,920	
3	5	Total ...	...	...	1,800	2,250	11,520	15,570
		PETTY ESTABLISHMENT.						
...	1	Storekeeper ...	220	220	...	...	2,640	
...	1	One Writer and one Lascar ...	37	37	...	...	444	
...	1	Godown-keeper ...	25	25	...	225	...	
...	3	Total ...	...	...	...	225	3,084	3,309
		OFFICE ESTABLISHMENT.						
		<i>Superintendent of Works.</i>						
1	1	Head Clerk ...	80	80	...	...	960	
4	4	Clerks from Rs. 35, 30, 25, and 20.	110	110	300	...	720	
1	1	Cashier ...	40	40	240	...	...	
1	1	Draughtsman ...	40	40	240	...	...	
...	1	Surveyor ...	20	20	120	...	...	
3	3	Peons on Rs. 7 ...	21	21	...	...	252	
10	11	Total ...	...	...	900	...	1,932	2,832
		<i>Assistant Superintendent.</i>						
1	1	Clerk ...	35	35	...	...	420	
2	2	Draughtsmen from Rs. 40 to 20 ...	60	60	360	...	...	
1	1	Surveyor ...	50	50	...	...	600	
3	3	Peons on Rs. 7 ...	21	21	...	...	252	
7	7	Total ...	...	...	360	...	1,272	1,632

Detail of the Budget-Estimate for Establishment for the Harbour Works in Madras for 1881-82—cont.

NUMBER.		Particulars.	Salary of Office.	ESTIMATE FOR 1881-82.				
1880-81.	1881-82.			Per Mensem.	For 6 Months.	For 9 Months.	For 12 Months.	Total.
		CONSTRUCTION—cont.	RS.	RS.	RS.	RS.	RS.	RS.
		OFFICE ESTABLISHMENT—cont.						
		<i>Sub-Engineer's Establishment.</i>						
2	2	Clerks from Rs. 40 to 25 ...	65	65	...	...	780	
1	1	Draughtsman ...	20	20	120	...	...	
2	2	Peons on Rs. 7 ...	14	14	...	...	168	
5	5	Total ...	...	...	120	...	948	1,068
		<i>Superintendent of Quarries.</i>						
1	1	Clerk ...	20	20	120	...	...	
2	2	Lascars on Rs. 6 ...	12	12	72	...	...	
3	3	Total ...	...	...	192	...	...	192
		Presidency house-rent and Allowances to Sub-Engineer, &c. ...	...	...	...	...	2,040	
		Total ...	...	...	...	...	2,040	2,040
		Total Salaries ...	...	...	...	...	...	50,043
		Travelling Allowances ...	...	...	...	...	...	2,900
		Office Expenses and Contingencies ...	...	...	...	...	...	1,500
		Total ...	...	...	...	...	...	54,443

ABSTRACT of foregoing provision for Establishment.

						Salaries.	Travelling Allowances.	Contingencies.	TOTAL.	
									1881-82.	1880-81.
						RS.	RS.	RS.	RS.	RS.
Direction	...	...	...	...	...	5,000	...	...	5,000	...
Construction	...	...	...	...	...	50,043	2,900	1,500	54,443	...
Total ...						55,043	2,900	1,500	59,443	...

MADRAS,
— December 1880.(Signed) F. N. THOROWGOOD,
Superintendent, Madras Harbour Works.

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of {1880} Madras.
PUBLIC WORKS.

To

THE SUPERINTENDENT, MADRAS
HARBOUR WORKS,

&c., &c., &c.

Dated October, 29th.

Issued

Recd.

Encl.

G. O., 29th October 1880, No. 2,502-A W.

OCTOBER.

Nos. 126-127.

Mooring Apparatus for the Madras Harbour Works.—Letter from the Government of India directing that provision be made in the Regular Estimate of the current year for the outlay on the —, communicated to officers concerned, and the Government of India addressed on the subject of the insufficiency of the current year's grant for the Harbour Works.

2 PUBLIC WORKS DEPARTMENT, 29TH OCTOBER 1880, No. 2,502-A W.

No. 126-A. From Major D. H. TRAIL, R.E., Officiating Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 20th October 1880, No. 114 W.

COPY of the following forwarded to the Secretary to Government, Public Works Department, for information.

From the Examiner of Public Works Accounts, to the Accountant-General, Public Works Department, dated 19th October 1880, No. 137 A.

I have the honor to submit for your information copy of the letter received from the Superintendent of the Madras Harbour Works in reply to my letter No. 515 X, dated the 12th instant, copy of which was forwarded with this office endorsement No. 131 A of the 12th idem.

No. 126-B. From Captain W. J. TOMKINS, R.E., Assistant Secretary to the Government of India, Public Works Department, (Civil Works—Miscellaneous,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 18th October 1880, No. 243 M.

REFERRING to your letter, dated the 24th September 1880, without number, I am directed to state that, since it has been found impracticable to provide the necessary funds by re-appropriation of the Madras Budget credits, to meet the outlay on the mooring apparatus for the Madras Harbour, I am directed to request that the necessary provision for the outlay in question may be made in the Regular Estimate for the current year. Including this amount the total outlay on the Harbour Works during the current year must not exceed 14 lakhs.

No. 127. ORDER THEREON, 29th October 1880, No. 2,502-A W.

ORDERED that the Government of India be addressed.

2. The orders contained in the Government of India letter above quoted are communicated to the Superintendent, Madras Harbour Works, and the Examiner of Public Works Accounts for information and guidance.

(Here enter No. 2,502 B W., dated 29th October 1880.)

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
,, Examiner of Public Works Accounts.

Exd. S. T. Austin.
Spare Copies

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

29th October 1880, No. 2,502-A W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 126. From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 18th October 1880, No. 49 W.

I HAVE the honor to enclose herewith copies of correspondence between the Examiner of Public Works Accounts and myself regarding funds for these works.

2. You will see that I shall require Rs. 1,57,230 in addition to the Rs. 12,00,000 sanctioned for the current year for the works alone. But the Examiner tells me that I ought to allow for the moorings in my request for supplemental funds.

3. I am not aware in what state the mooring contract at home is, so I allow Rs. 1,80,000 additional, which should be sufficient to cover the cost of what will be done by 31st March 1881.

4. A total supplemental grant of Rs. 3,37,230 will, therefore, be required to carry work on at full speed to the end of the present financial year.

From Major D. H. TRAIL, R.E., Officiating Examiner of Public Works Accounts, to the Superintendent, Madras Harbour Works, dated Madras, 12th October 1880, No. 515 X.

I HAVE the honor to bring to your notice that, according to the entries in your return of grants, expenditure, and balance on the 10th September 1880, your expenditure amounts to nearly eight lakhs, leaving about four lakhs for expenditure in the ensuing six months, which according to G.O., No. 2,048 W., of the 30th August 1880, will also have to meet the outlay in England on the mooring apparatus.

2. It appears therefore desirable that you should make a very careful estimate of your probable requirements for the next six months, and if there appears to be any ground for apprehending an excess of outlay over grant, it is necessary that you should lose no time in representing the matter to Government and applying for a supplemental grant.

From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Examiner of Public Works Accounts, dated Madras, 16th October 1880, No. 52 C.

In reply to your letter No. 515 X, of the 12th instant, I have the honor to state that I shall require a supplemental grant for the works themselves apart from the funds required for the moorings.

2. It will be remembered that my original request for the current year was cut down from Rs. 12,44,764 to 12 lakhs of rupees, that being the limit which could be allowed at the time, so there is nothing surprising in the fact that this sum will be exceeded.

3. I estimate that I shall require an additional grant of Rs. 1,57,230 for the works up to 31st March, and a further sum of Rs. 1,80,000 for the moorings or as much of them as can be fixed by 31st March. This gives a total of Rs. 3,37,230 required for the remainder of the financial year in addition to the grant of Rs. 12,00,000 already sanctioned.

4. Copies of this correspondence will be forwarded to the Government.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1880) Madras.
PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated October, 29th.

Issued

Recd.

Encl.

G. O., 29th October 1880, No. 2,502-B W.

OCTOBER.
No. 128.

ADDRESSING on the subject of the insufficiency of the current year's grant for the Harbour Works.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 2,502-B W.

No. 128.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—I am directed to forward copy of Proceedings of this Government marginally noted in regard to the insufficiency of the current year's grant for the Harbour Works. The premature exhaustion of the allotment is due simply to rapid progress which is *per se* a matter for congratulation, and on every ground it is desirable that the additional grant required by the Superintendent of the Works should be made. "Provincial" being responsible for the interest, there can, it is presumed, be no financial objection to the grant.

2. It has been from time to time urged by this Government that nothing should be suffered to stand in the way of the earliest possible completion of the Harbour, so that the costly establishment should be utilised to the utmost and discontinued as soon as possible and a return obtained at the earliest possible date.

3. The cost of the moorings will, in accordance with the instructions given in your letter of the 18th October 1880, No. 243 M., be included in the Regular Estimate for the year.

I have the honor to be,

Sir,

Your most obedient servant,

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

FORT ST. GEORGE,
29th October 1880.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1880) Madras.
PUBLIC WORKS.

TO

THE SUPERINTENDENT OF
MADRAS HARBOUR WORKS,

&c., &c., &c.

Dated December, 1st.

Issued

Recd.

Encl.

G. O., 1st December 1880, No. 2,765 W.

DECEMBER.

Nos. 5-6.

Madras Harbour Works.—Letter from the Government of India communicating sanction of an additional grant of Rs. 1,37,230 for the —, communicated to the Superintendent and the Examiner of Public Works Accounts.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

1st December 1880, No. 2,765 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 5. From A. B. SAMPSON, Esq., Under Secretary to the Government of India, Public Works Department, (Civil Works—Miscellaneous,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 18th November 1880, No. 271 M.

In reply to your letter without number, dated 29th October 1880, I am directed to communicate the sanction of the Government of India to an additional grant of Rs. 1,37,230, under 34 Other Public Works, for the Madras Harbour Works. This addition will raise the grant for the current official year to Rs. 15,37,230.

2. The Superintendent should be warned that the sum now sanctioned must not be exceeded.

No. 6. ORDER THEREON, 1st December 1880, No. 2,765 W.

COMMUNICATED to the Superintendent, Madras Harbour Works, and the Examiner of Public Works Accounts, with reference to G.O., No. 2,502-A W., dated 29th October 1880.

2. The special attention of the Superintendent, Madras Harbour Works, is called to paragraph 2 of the above letter.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
" Examiner of Public Works Accounts.

Exd. S. T. Austin.
Spare Copies

Letter from the Supt., Madras Harbour
Works, No. 254, dated 25th June 1880.

(2) figures
altered - see 5

FOR ORDERS. with office note
by Colonel Sankey.

2. The following
shows briefly the
financial position.

(1) Mr. Parker's original
estimate - 56,50,790

(2) Do as increased
for extra rubble base - 58,50,790

No. (2) is the present
sanctioned estimate.

Probable saving as recorded

in G.O. No. 1120 A. & F.
10th May 1880. 4,20,173

Probable actual expendi-

ture on the works - 54,30,617

Cost of moorings £ 18,000

at $1\frac{1}{2}$ - - - - 2,20,752

56,51,369

pier heads as per cost

of Mr. Parkes' design - 3,76,300

288

deduct 160 feet of pier

on each flank, included

in estimate of Rs 54,30,604 - 2,99,520

~~76,780~~

Balance being extra cost

of pier heads as designed

by Mr. Parkes - 76,780

~~2,09,700~~

Total cost including

moorings and pier heads - 57,28,149

~~58,61,269~~

Saving

on sanctioned estimate Rs 40,479

1,22,641

Saving

with Mr. Sharrowgood's

modification of Mr. Parkes'

pier heads - 40,841

~~Rs 40,479~~

with

The result was that
after providing for
Mr. Parkes' modified
form of entrance. We
shall not have the
money to pay for the
moorings. The order
for 50 must then be
I think be suspended
at once & we can
provide for the
deficiency
the cost.
I think
we must
stop the
for the

up for

or where
J. W.
adopted
think

order
moorings.

3. With reference to
His Grace the Governor's
note of 14th June, attention
is solicited to the
opening sentence of
Mr. Sharrowgood's office
note of 9th idem.

John Penn
Major R. C.
Lt. Col. D. C.
P. H. D.

8th July/80

red.
at 1/10

D. W.

As I understood
the S. & W. Mr. Parker
design will add say
209,800 to his original
estimate of 58 labels
odd and as he is a
responsible advisor
Govt. and his proper
head can it seems
convenient not to check
by about Rs 82,000
but suggested by
Thomas Wood I think
it ought to be added.

In the note sent in
circulation on the subject
it will be desirable
show so far as known
the probable outlay

- (1) Harbour works
designed
- (2) the additions to
pier heads
- (3) moorings

P. h. Dept

(3)

With reference to the
Honorable Mr. Ruddlestone's
remarks on the "for orders"
note of the 8th instant, the
undersigned has the
honor to solicit attention
to the proportion between
the expected excess and
the sanctioned estimate.

2. The estimated expendi-
ture, including the cost
of the moorings and of the
pier heads on Mr. Parker's
design is Rs 58,61,269
involving an excess of
Rs 10,479 on a sanctioned
estimate of Rs 58,50,790;
this excess is less than

Cir: 22-7-80.

20.7.80 D. 29.7.

Cir: 16-7-80.

Sent Govt. 15.7.80

Cir: 8.7.80. Rtd 12.7.80

only 6/7/80

2 (one fifth) per cent.

Even with Mr. Thurgood's
proposed modification
the excess (\$ 92,279) is
only 1.6 per cent.

3. As the Local Govern-
ment have power to pass
excess expenditure on
"Productive" works up to
2 1/2 per cent on the sanc-
tioned estimate, it seems
unnecessary to suspend
or cancel the order for the
moorings.

4. Orders are solicited
as to the form of the pier
head to be adopted,
concerning which no in-
structions have been given.

Thos. B. Cunningham - Inspector

For order Secy to Govt
16 July 1880

Vogel

I think with Col. Lusk
that we must be
guided by Mr. Parker

J. D.

16/7

Hon. W. Huddleston

London

(3)

had submitted an estimate
of the probable saving for the
mornings I had to guess at
the pier heads and allowed
128 feet. beyond the originally
"proposed termination" - In

other words I had allowed
for £1,33,120 to cover what
appears to amount up to
£1,21,09,900 - The excess
cost (on paper) will be
£^{886?} 76,780 over what I
submitted on 23rd March & May 6.

I should remark that there
are practical difficulties in
Mr. Parker's design which I cannot
reduce to figures - and I am
still begging him to alter it -

The figures only represent
so much of the base, blocks &
superintendence, they do not

allow for loss of a Titan -

J. H. H. H. H. H.
Inf. W. H. H. H.

Gr 16.7 - Rd 17.7 - 80.

6.15.7.80

GOVT.
OF MADRAS.

1880.

P.W.
DEPT.

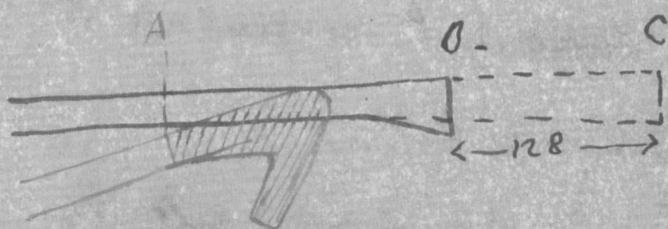
MAN. July 19.
East St. George,

1880.

OFFICE NOTE.

To S. W.

You will remember that the original design was for an entrance of 450 ft. - the present design for 550 ft.



Original design in black.
Modifications in red. The present Pier head commences at A, from A to B is 160 feet. Therefore 160 ft. provided for in the original estimate is saved for making the altered head. In my estimate (25th June 25) I allow for this 160 ft. clearly enough - When I

P. L. D.

Note.

(5)

In submitting the accompanying draft L.C., the undersigned has the honour to state that, as explained in (dated 19th July) the note now put up, Mr. Hosawood is in communication with Mr. Parker regarding the form of pier head, and it is not impossible that the latter will modify his design.

2. It appears better therefore to defer final decision till Mr. Parker

See

17th

22-7-80.

16-7-80. 17-7-80.

Rev. W. H. Hudson

(5)

1812W



R 27/7

Cor: 22-7-80.

6-20-7-80

(4.) having anticipated
after allowing for modified
design of pier heads
as proposed by Mr Parker
+ for cost of moorings ... 1,22,641

[or ditto ditto,
with your design ... 40,841]

Total ... 58,50,790

M.P.
27/8

~~27/8~~

27-8-80

to verify the outlay
up to 1st April last
was Rs. 39,64,703, +

the following figures
represent, it is assumed,
the financial position
as nearly as can
be at the present
time -

£

Sanctioned ...
for works, including
interest on loan ... 58,50,790.

(1) Outlay to 1880-81 ... 39,64,703.

Estimated outlay during
current year on works ... 12,00,000.

(2) ditto - on moorings,
for which provision of
funds has yet to be
made in connection with
the Govt. of India ... 2,20,752.

(3) Outlay during 1881-82
(estimated) ... 342,649

[or, if your design of
pier heads be adopted in
lieu of Mr Parker's, ... 4,24,494]

27/7
27-7-80.

GOVT.
OF MADRAS.

1870.

P. W.
DEPT.

SECRETARY.

Rotacammal, August 27th 1880.
~~Port St. George.~~

OFFICE NOTE

To

S. H. H. W.

With reference to O. F.
No. 1812 W of 29th
July, 1880, have you
heard any thing
more from Mr. Barker
about the design
of the pier heads?

2. There is a figure wrong
in para. 4 of your
last letter printed
with that order; Rs.
76,000 being entered
instead of 76,700.

3. According to a
statement furnished
by the C. which
he has been asked

Mr. Duffton to check this

OF

187

1,22,641

40,841

58,50,790

ing is still before the
the Council, and
miss themselves ad
red.

No

or
pi
ag
L

14 of 3rd Sept^r 1880.

S. W.

This may be
Recorded

Att

2/9/80

Madras Harbour
Fort St. George, August 22, 1880

OFFICE NOTE.

To W.

I have not heard
from Mr. Parkes of
Pier heads, but
the design will be
between the two styles
suggested.

If the return walls are
of Mr. Parkes's design
the unnecessary the
not be built, but the
remainder of his design
probably be carried out.
cost will therefore be less
than I have estimated.

Your figures appear to represent
the financial position correctly.

I understand from Mr. Parkes's
last letter that the question
is disposed of.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

29th July 1880, No. 1,812 W.

Buildings and Roads,
Civil Works.

Read the following paper:—

No. 121 From F. N. THOROWGOOD, Esq., M. INST. C.E., Superintendent,
Madras Harbour Works, to the Secretary to Government, Public Works
Department, Buildings and Roads, dated Madras, 25th June 1880, No. 25 W.

I HAVE the honor to submit herewith estimates for the two designs of pier heads
referred to in G.O., No. 1,435 W, of the 18th June. But I would remark that the
original estimate for the piers as at first designed allows for 160 feet of completed
pier on each side the entrance in place of the heads, the cost of which must be set off
against the cost of the pier heads now proposed to be substituted for that length.

2. Estimate for Mr. Parkes' design (with a returning wing wall within
harbour):—

Rubble base in total pier head, 26,000 tons, at Rs. 2	RS.	52,000
Concrete blocks set in position, 9,725 cubic yards, at Rs. 14	...	1,36,150
(I.) Total	...	1,88,150

Deduct—

160 lineal feet of plain pier complete provided for in original esti- mate in place of pier head now designed, at Rs. 520 per foot	...	83,200
Extra for one pier	...	1,04,950
For both piers	...	2,09,900

3. Estimate for Superintendent's proposed modification, without wing walls—

Rubble base on pier head, 31,700 tons, at Rs. 2	RS.	63,400
Concrete blocks set in position, 13,875 cubic yards, at Rs. 14	...	1,94,250
(II.) Total	...	2,57,650

Deduct—

215 lineal feet already provided for in estimate, at Rs. 520 per foot	...	1,11,800
Total extra for one pier	...	1,45,850
For both piers	...	2,91,700

4. It thus appears that an extra cost over the original design of Rs. 2,09,900 is
incurred by Mr. Parkes' pier heads, and of Rs. 2,91,700 by my modification. In
submitting my estimate of the probable saving on the works (for providing moorings)
see G.O., No. 854 W., of 3rd April 1880, as I had received no design at the time for
pier heads I allowed for 128 lineal feet extra, beyond the originally proposed termina-
tion, for each pier at the rate of Rs. 520 per foot, which gives a total of Rs. 1,33,120
to cover the cost of the two pier heads, a sum that wants Rs. 76,880 of being sufficient
to cover the cheaper design of the two.

Should be
76,780

No. 122. ORDER THEREON, 29th July 1880, No. 1,812 W.

THE Government await the result of the communication which it is understood that the Superintendent, Madras Harbour Works, has addressed to Mr. Parkes, before deciding definitely on the form of pier head to be adopted.

2. It is not at present considered necessary to discuss the means of making the harbour defensible against an enemy.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintendent, Madras Harbour Works.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1880) Madras.
PUBLIC WORKS.

To
THE SUPERINTENDENT, MADRAS
HARBOUR WORKS,

Dated July, 29th.

Issued

Recd.

Encl.

G. O., 29th July 1880, No. 1,812 W.

JULY.
Nos. 121-122.

Pier Head, Madras Harbour Works.—
The result of the Superintendent's communication to Mr. Parkes regarding the design for — awaited before deciding about it, and considering it unnecessary to discuss the means of making the harbour defensible against an enemy.

Refer to information.
The Military Dept. of
the f. of S. have attached
the local Govt. in their
dept. & the papers
are now in circulation.

It will not be of
use to send them
another copy of
the letter. The
the papers referred
to in your note
are at Madras
& have been written
for.

Meanwhile search
order will

CALW

In I of I request
 have that the scheme
 in the command of
 F. D. Jones' should be
 carried into effect as
 soon as possible if
 it is deemed appropriate
 necessary to commit
 it. At once to the
 War Dept.

Reference is
 also made here to
 "tunnels and iron
 "painted batteries on the
 "breakwaters" of the harbor.
 I should therefore wish
 to see before the
 next session of the
 War Dept. an
 exhibit of battery
 the Harbor Dept.

for Works.—
 at's communi-
 cating the design
 about it, and
 to discuss the
 your defensible

die and
 the
 22/10/50
 W. H. H.

The Mater offer
 have as yet been
 unable to find
 the original of
 G.O. No. 1812 W. 29th
 July, 1880.

As has already
 been explained,
 this is merely
 sent for info.
 The question is
 under disposal
 in the Military
 Dept., & will
 come to this
 in due course.

There appears to
 be no objection
 to the issue of
 the order. If
 you see none
 will you please
 initial the draft?

Meanwhile reach for the missing
 order will continue to be made.

6/11

W. H. H.

C. R. W.
 by surd -
 Amount - disburse
 by the M. S. Dept.
 - order initiated
 R. H.
 6/11/50

S. A. W.
 This may be attached
 to the original of the
 G. O. referred to.

R. S.
 18/12 W
 18-4-81.

R. C.

s. -
 uni-
 sign
 and
 the
 sible

No. 25 W

From

THE SUPERINTENDENT,
 MADRAS HARBOUR WORKS,

To Colonel R. H. Sankey, C. B. R. E.
 Secretary to Government P. W. Dept.
 Buildings and Roads
 Fort Saint George
 MADRAS, 25 June 1850

Sir,

I have the honor to submit herewith
 estimates for the two designs of Pier
 heads, referred to in G. O. No. 1435 W of
 the 18th June. But I would remark
 that the original estimate for the
 piers as at first designed allows
 for 150 feet of completed pier on
 each side the entrance in place
 of the heads, the cost of which
 must be set off against the
 cost of the Pier heads now
 proposed to be substituted for
 that length.

2. Estimate for Mr. Parkes's design -
 (with a returning wing wall within harbour)
 Rubble base in total Pier head. ^{to top} 20,000 cu yds @ Rs 2 = 52,000
 Concrete blocks set in position 9725 cu yds @ Rs 14 = 136,150

(I)

Total Rs 188,150

(I) Total Rs 188,150

Deduct
160 lineal feet of plain pier
Complete provided for in
original estimate ^{in place} of Pier
head now designed :-

@ Rs 520 per foot. 83,200

Extra for one pier Rs 1,04,950

For both Piers Rs 209,900

3. Estimate for Superintendence proposed
Modification, without wing walls.

Rubble Base on Pierhead ^{tons} 31700 @ Rs 2 = 63,400

Concrete blocks, set in ^{cubic} position 13,875 @ Rs 14 = 1,94,250

(II.) Total 2,57,650

Deduct

215 lineal feet already provided

for in estimate @ Rs 520 per foot 1,11,800

Total extra for one Pier 1,45,850

For both piers Rs 2,91,700

4. It thus appears that an
extra cost over the original design
of Rs 2,09,900 is incurred
by Mr. Parkes's Pier heads, and

of Rs 2,91,700 by my modification.
In submitting my estimate of
the probable saving on the works
(for providing moorings) see G.O. 854
W of April 3rd 1880 as I had received
no design at the time for Pier
heads I allowed for 128 lineal feet
extra, beyond the originally
proposed termination, for each
pier at the rate of Rs 520 per foot,
which gives a total of Rs 1,33,120 to
cover the cost of the two pier heads
a sum that wants Rs 76,880 of
being sufficient to cover the
cheaper design of the two.

I have the honor to be,
Sir,

Your most Obedt Servt

A. W. Horrocks
Superintendent
of the works

209900
133120
76780

W
Gid Epl

No 1812. W.

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 29th July '80.

Read the following:—

From the Super^t In. W. Works (N.E. No. 254 of 25 June 1880)

The Government await the result of the communication which it is understood that the Superintendent, Madras Harbour Works has addressed Mr. Parker, before deciding definitely on the form of pier head to be adopted.

2- It is not at present considered necessary to discuss the means of making the harbour defensible.

Buildings and Roads

From,
The Superintendent
Madras Harbour Works

P.W.D.

28 JUN 80

N^o 4126

No 25 W-

Dated 25th June 1880

W

Submit Supplemental
Estimate for Pier heads

Mps No 1435 W of 18.6.80 with tracing
" 1113 A W " 10.5. "
GO " 1120 A, B. W " 10.5. "
" 1316 W " 4.6. "
" 854 W " 3.4. "
Mps. 933 " 22.3. "
" 1396 " 25.5. "

Cir 16.7.80.
Sent by post 12.7.80
Cir 8.7.80. Ret 12.7.80 -
Only 6/7/80 A. 14.7.

defensible against an
enemy -

S₂₀₇

Print Socy

26/7

Sept. M. B. W. K. S.

11-8-80

Ro 27/7

fr. 22-7-80

11-8-80 A. 29-7

4126
 G.O. of (1880) Madras.
 PUBLIC WORKS.

To

Dated

Issued

Recd.

Encl.

G. O., 29 July 1880, No. 1812W.

Nos.

24
 2

Pier Head - Madras
 Harbour Works.

defensible against
 an enemy

The result of the
 Supt's communication
 to Mr Pauler
 regarding the design
 for — awaited
 before deciding about it.
 And considering
 it unnecessary to
 discuss the means of
 making the harbour

for military service
 to be borne by Provincial.
 It agreed to let the matter
^{be brought up} to be brought up by
 you when necessary.

The file was sent
 down to you on the 14th Sept

M.

6/11

W. 8/11

Herewith

9/11

SECRETARY.

W. Laumann
Chepauk,

1st - Nov 1880

OFFICE NOTE.

To

C. R. W. The original of No. 1812 W of 29 July 1880, which W wants to per in connection with C No 5502, will, I think, be found in the L. C. file at Madras in regard to the interests of the on loan during construction. Deputy W having stated that he did not think the Govt. of India would be likely to press the arrangements under which to my guess only Rs 4,000

*Proceedings of the Madras Government, Public Works Department,
11th May 1874.*

Read the following papers :—

No. 265. Proceedings of the Board of Revenue, dated 27th January 1874,
No. 144.

Read the following letter from A. McC. WEBSTER, Esq., Acting Collector of Sea Customs, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Madras, 24th January 1874, No. 91.

As directed by the Board in their Proceedings of 11th December 1873, No. 2,542, I have the honour to report on the question of raising a revenue from the trade of Madras for the up-keep of the proposed new harbour, and for the payment of interest on the capital expended in its construction.

2. I was directed to report after consultation with the Chamber of Commerce and the Master Attendant; but as I have only recently been able to send them the returns of the trade of the Port, which have necessarily taken a considerable time in compiling, their replies to my reference will probably not be received for some little time. I am unwilling, however, to delay my report any longer, the more so, as I believe the Board are anxious to have it as soon as possible. I therefore now submit it, and will forward the reports of the Master Attendant and Chamber of Commerce as soon as they are received.

3. I beg to forward the undermentioned Statements prepared for the official year 1872-73. The statement of Railway material imported is not yet ready. It will be sent as soon as it is prepared:—

- (1.) The tonnage of goods exported and imported.
- (2.) The tonnage of vessels visiting the Port, distinguishing Steamers, Ships, and Native Craft, and the actual collection of Port dues from each class.
- (3.) The value of exports and imports, including specie.
- (4.) Memorandum showing the rates of Port dues, and the period for which one payment is sufficient.

4. The Government in paragraph 2 of their Proceedings state that in order to defray the interest on capital expended and the cost of up-keep of the harbour, a sum of at least £36,000 will be required.

5. I find on reference to the Report of the Breakwater Committee that two methods of levying dues were proposed. The Committee proposed to levy increased Port dues on the shipping, and an *ad valorem* fee on goods. The figures quoted by them at the time cannot be taken in preparing an estimate of what would be collected now, as both the shipping and value of exports and imports have, if their figures were correct at the time, materially increased.

6. The Committee's estimate was as follows:—

On Shipping.						
			Tons.			
Steamers	...	...	146,000	at 8 Annas per ton	...	73,000 0 0
Native Crafts	...	...	39,000	at 12 " "	...	29,000 0 0
Ships	...	...	119,000	at 1 Rupee "	...	1,19,000 0 0
						2,21,250 0 0

*Proceedings of the Madras Government, Public Works Department,
11th May 1874.*

<i>On Goods.</i>		RS.	A.	P.
Exports and Imports 500,00,000 at 1 per cent. ...	...	5,00,000	0	0
Total...	...	7,21,250	0	0

According to the Trade and Shipping Returns for 1872-73 the following would be the result at the Committee's rates:—

<i>On Shipping.</i>		Tons.	RS.	A.	P.
Steamers ...	...	286,144 at 8 Annas per ton	1,43,072	0	0
Ships ...	...	106,638 at 1 Rupee	1,06,638	0	0
Native Crafts ...	...	53,726 at 12 Annas	40,294	8	0
			2,90,004	8	0

<i>On Goods.</i>									
Exports and Imports excluding Treasure 833,01,554, at 1									
per cent	...	...	...	...	...	...	...	...	...
								8,33,015	8 0
								Total...	11,23,020 0 0

Increase on last year's returns Rupees 4,01,770. If treasure is taxed at the same rate the increase would be Rupees 5,12,417.

7. Mr. Macfadyen, in his Memorandum on this subject, which was circulated to the Mercantile Firms at Madras, also proposed to levy fees on both the shipping and goods. As to goods, he was in favour of a differential rate per package. His estimate was as follows:—

<i>Shipping.</i>		Tons.	RS.	A.	P.
Steamers ...	...	146,000 at 8 Annas per Ton	73,000	0	0
Ships ...	...	119,000 at 1 Rupee	1,19,000	0	0
Native Crafts	...	39,000 at 12 Annas	29,250	0	0
			2,21,250	0	0

<i>Goods.</i>		RS.	A.	P.
Bags	1,519,160 at 1½ Annas per bag	1,42,400	0	0
Bales and Cases ...	245,529 at 3 „ per package	46,000	0	0
Trunks and Chests	20,165 at 3 „ each ...	3,800	0	0
Packages	100,554 at 2 „ „ ...	12,500	0	0
Hhds., Barrels, and Casks	44,584 at 2 „ „ ...	5,500	0	0
Add 145,000 tons not included in above at Rs. 1-8-0		2,17,500	0	0
			4,27,700	0 0
			6,48,950	0 0

8. I do not know how Mr. Macfadyen got his figures. They differ very considerably as will be seen from the returns now submitted. According to last year's returns the result of taxing the trade on his method would be—

*Proceedings of the Madras Government, Public Works Department,
11th May 1874.*

<i>Shipping.</i>		RS.	A.	P.	RS.	A.	P.
As shown in paragraph 6 ...	...	2,90,004	8	0	2,90,004	8	0

		<i>Goods.</i>					
Bags	872,996 at 1½ Annas	81,843	6	0			
Bales and Cases	302,619 at 3 „	56,741	4	0			
Chests	16,118 at 3 „	3,022	2	0			
Packages	398,693 at 2 „	49,836	10	0			
Hhds., Barrels, and Casks	32,559 at 2 „	4,069	14	0			
						1,55,513	1 0

<i>Other articles at rate per number, not per ton.</i>									
Buffaloe horns	492,208	at 1½ Annas	per 100	...	461	7	0		
Timber and Palmyras	483,523	at 1½	„ each	...	45,330	4	6		
Cocoanuts	163,930	at 1	„ per 100	...	102	7	0		
Chanks	512,000	at 1	„ „ „	...	320	0	0		
								46,214	2 6
Metals, Coal, Coke at Mr. Macfadyen's estimate, say 135 tons,									
at Rupees 1-8-0 per ton	...	...	...	...	2,02,500	0	0		
								2,02,500	0 0
								Total...	6,94,231 11 6

Increase at last year's returns ... 45,281 11 6

9. By either of these two methods, we should, at the rates proposed, obtain a far larger income than we require, and if either is adopted the rates can be very materially lowered.

10. The Breakwater Committee do not appear to have taken the question of obtaining the required amount by a single tax on the shipping into consideration. They probably were of opinion that such a method was entirely out of the question; as to obtain from this source a sufficient return on an expenditure of £ 1,000,000 would necessitate a very heavy rate of Port dues, which the shipping could not possibly pay.

11. Owing to the great reduction on the proposed expenditure on the Harbour, we do not now require such a large return as was contemplated by the Committee, and it is, I think, worth consideration whether the amount could not be obtained by one tax only, and that on the shipping. The advantages of this method over a double tax are obvious. The collection of a tax on all goods exported and imported will, it is almost needless to observe, entail very great trouble and will require an increased establishment. It will also lead to very great inquisition and will require constant and careful supervision to guard against laxity on the one hand, and delays and annoyance on the other. When it is considered that at present dutiable goods only pay a tax to Government, it is clear that the determination to charge all goods must of necessity cause very greatly increased work to the establishment and probably delay to the merchants.

12. I leave out of question the proposal in Mr. Macfadyen's Memorandum to charge a differential tax per package. This is, I think, impracticable, and would be very unequal in its incidence. The proposal to collect the tax on the weight, besides being very difficult to carry out, would fall unequally on the different des-

Proceedings of the Madras Government, Public Works Department,
11th May 1874.

criptions of merchandize; a ton of piece goods while it would necessitate everything being weighed. ... 500 at 1 per cent. as paying no more than a ton of iron, being brought into the Custom-house to be

13. It appears to me that whether we obtain the money we require by a tax on the shipping and goods, or on the goods alone, the consignees will eventually pay, either directly on the goods, or partly directly on them and partly in increased freight, and I believe, therefore, that it will be immaterial to them how the amount is collected, and that if we obtain a revenue from the shipping alone, the consignees will pay no more in increased freight than they would pay in two ways, by the tax being levied on both shipping and goods.

14. If it is determined to levy a tax on goods, the only manner in which such a tax could be collected would be by an *ad valorem* fee, and I would recommend the adoption of that method, but only if it is determined that goods must be taxed. According to last year's returns, a tax of $\frac{1}{2}$ per cent. on all goods excluding treasure would give us Rupees 4,16,507, or more than Rupees 50,000 in excess of the amount required, while a similar tax on treasure as well, would result in a further excess of Rupees 55,323.

15. I beg, however, to recommend that no tax whatever be imposed on goods, and that we should obtain the money we require by a tax on the shipping alone, and I more especially recommend this course, as I think it will be seen that the amount can be obtained by a not very heavy rate of port dues. There will be no difficulty in the collection of such a tax, as the ship will pay it as soon as she enters the Harbour.

16. I calculate that taking the returns for last year as a basis, and I see no reason why we should consider them liable to any great reduction in future years, we should obtain the following result:—

	Tons.		RS.	A.	P.
Foreign Steamers	... 223,596 at 1 Rupee per ton	...	2,23,596	0	0
Coasting do.	... 62,548 at 4 Annas	..	15,637	0	0
Ships	... 106,638 at 1 Rupee	..	1,06,638	0	0
Native Craft	... 53,726 at 4 Annas	..	13,431	0	0
Total...			3,59,302	0	0

or only Rupees 700 less than the amount the Government require.

17. The present collection of port dues at Madras is as follows:—

	Tons.		RS.	A.	P.
Foreign Steamers	... 223,596 at 3 Annas	... ..	24,512	6	11
Coasting do.	... 62,548 at $4\frac{1}{2}$ Annas	... ..	850	3	6
Ships	... 106,638 at 3 Annas and $1\frac{1}{2}$ Annas..	...	18,870	12	0
Native Crafts	... 53,726 at $1\frac{1}{2}$ Annas	... ..	4,308	11	6
Total...			48,542	4	11

and as we shall still require that amount to meet the present expenditure on the port, we must add the rates now paid to the special Harbour rates I have proposed above. The only alteration I would make would be in the rate paid by the coasting steamers. It will be observed that at present this class of steamers pays an

Proceedings of the Madras Government, Public Works Department,
11th May 1874.

altogether disproportionate amount of Port dues at Madras, amounting only to about 2 pice per ton per annum. This is owing to the present arrangement of grouping ports by which (Section 5, Act VII. of 1867) coasting steamers pay at only one port in the group, and they do that naturally at the ports of entry; for

Gopaulpore, 2 Annas per ton.
Tuticorin, 3 Annas per ton.
Madras, 4 Annas 6 Pice per ton.

the Coromandel coast, Gopaulpore; or Tuticorin, where the rates of port dues are less than at Madras. For the future

I would recommend that the rate for coasting steamers be assimilated to that charged on native craft or $1\frac{1}{2}$ Annas per ton. This would bring the total rate on steamers of this class to $5\frac{1}{2}$ Annas per ton which is not, I think, excessive.

18. The result of this proposal, if adopted, will be as follows:—

	Tons.		RS.	A.	P.
Foreign Steamers	... 223,596, at Rupees 1-3-0 per ton	...	2,65,520	4	0
Coasting do.	... 62,548, at Annas 5-6	do. ...	21,500	14	0
Ships	... 106,638, at Rupees 1-3-0	do. ...	1,26,632	10	0
Native Crafts	... 53,726, at Annas 5-6	do. ...	18,468	5	0
Total...			4,32,122	1	0

which will leave a small margin of extra revenue for any unforeseen expenses.

19. It will I think be necessary, if my proposals are adopted, to take Madras out of the Coromandel group and make it a port by itself, so that all vessels entering would have to pay.

20. I beg to forward, for the Board's information, a letter (in original) just received from the Master Attendant in reply to my reference. The Board will observe that he holds the same opinion that I do, viz., that the best method of raising a harbour revenue would be by increased port dues, leaving the question of the apportionment of the extra charges to be settled by shipowners, shippers and consignees themselves.

ENCLOSURE No. 1.

From H. D. E. DALRYMPLE, Esq., Master Attendant, Administrative Department, to A. McC.WEBSTER, Esq., Acting Collector of Sea Customs, dated Madras, 22nd January 1874, No. 427.

With reference to your letter, dated 20th January 1874, No. 77, and the papers specified in the margin, I have the honour to observe that I consider this question under discussion as a financial one, which could be most satisfactorily disposed of by the Board of Revenue and Chamber of Commerce.

2. My opinion is this—

To simplify matters, I would charge extra Port dues on all ships entering the harbour, and I have no doubt the shipowners, shippers and consignees would arrange among themselves how the extra charges should be apportioned.

3. I can offer no opinion on the probable income derived from the extra charges upon the trade and shipping of the port.

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ENCLOSURE No. 2.

Imports from Free Ports, 1872-73.

	Number.	Probable weight.	Probable contents.
		TONS.	
Bags	3,71,540	27,865½	Principally Grain.
Bales	18,059	4,603¼	Gunnies and Piece Goods.
Cases	12,207	1,829	Piece Goods and Liquors of sorts.
Packages	2,12,142	17,583	Unknown.
Cask, Hhds. and Pipe... ..	456	106½	Beer and Brandy, etc.
Buffaloe Horns	25,984	23	
Timber... ..	3,52,930	...	
Iron, Spelter, Copper and Metal Ware, etc.	23,824	761½	

Imports from Foreign Ports.

	Number.	Probable weight.	Probable contents.
		TONS.	
Cases	1,09,355	18,502½	Piece Goods.
Bales	33,852	8,629	Do.
Packages	62,089	3,929¼	Unknown.
Cask, Hhds. and Pipe... ..	28,041	6,470	Beer, etc.
Bags	2,466	185	Grain, etc.
Iron, Spelter and Copper, etc.	2,88,124	8,726	
Coal	...	24,371	
Palmyra	1,30,593	...	
Cocoanuts	1,63,930	...	
Chanks	5,12,000	...	

MADRAS,
24th January 1874.

(Signed) A. McC. WEBSTER,
Acting Collector.

ENCLOSURE No. 3.

Export, 1872-73.

	Number.	Probable weight.	Probable contents.
		TONS.	
Bags	4,98,990	39,429	Grain, Coffee, Sugar, Seeds, etc.
Bales	1,29,146	29,121	Cotton, Hides, Skins, Twist, Piece Goods, etc.
Packages	1,24,462	7,346	Different sorts.
Chests	16,118	1,166	Indigo.
Metals	48,031	1,905	Brass, Copper, Iron, etc.
Buffaloe Horns	4,66,224	260	
Casks, Barrels, Hhds... ..	4,062	814	Beer, Brandy, Oil, etc.

MADRAS,
24th January 1874.

(Signed) A. McC. WEBSTER,
Acting Collector.

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ENCLOSURE No. 4.

Import Tonnage and Collection of Port dues for 1872-73.

	Vessels.	Tons.	Port dues.
			RS. A. P.
Foreign Steamers	158	2,23,596	24,512 6 11
Coasting Steamers	69	62,548	850 3 6
Vessels	148	1,06,638	18,870 12 0
Dhonies or Native Crafts...	443	53,726	4,308 11 6
Total...	818	4,46,508	48,542 1 11

(Signed) A. McC. WEBSTER,
Acting Collector.

ENCLOSURE No. 5.

Statement showing the total value of Imports and Exports of Merchandize for the year 1872-73.

IMPORTS.

	Year.	Value of Merchandize.	Value of Treasure.
		RS.	RS.
	1872-73... ..	4,77,94,202	57,11,894

EXPORTS.

	Year.	Value of Merchandize.	Value of Treasure.
		RS.	RS.
	1872-73... ..	3,55,07,352	53,52,891

(Signed) A. McC. WEBSTER,
Acting Collector.

ENCLOSURE No. 6.

Memorandum showing the rates of Port-dues.

	A.	P.	
Coasting Steamer	4	6	once in 30 days in the same group.
Other Steamers	3	0	do. 90 do. do.
Ships Foreign	3	0	do. 90 do. do.
Ships Coasting	1	6	do. 90 do. do.
Dhonies	1	6	do. 60 do. do.

(Signed) A. McC. WEBSTER,
Acting Collector.

SUBMITTED to Government with reference to G. O., 4th December 1873,
No. 2,925.

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2. The statistics furnished by the Collector of Sea Customs show that there need be no apprehension whatever about providing for the interest and working fund on the loan which is to be raised for making the harbour. There is some doubt as to how the money should be collected but there is none as to the facility with which £36,000 or even more can be obtained.

3. Authorities differ as to whether the sum should be raised by a tonnage on ships entering the harbour, or a charge on goods landed, and if the latter whether the charge should be fixed by weight, by package or *ad valorem*.

4. The Board are disposed to agree with the Collector of Sea Customs that the sum should be raised entirely by increasing Port dues. Any other method of raising it would necessitate an enormous increase of accommodation at the Customs House and of the establishment employed there. The chief objection to this method is that it will press heavily on the calling trade. If a steamer of 1,000 tons calling to land 100 tons of cargo is charged the same as a steamer of the same size which lands its whole cargo and loads again before leaving the harbour the calling trade will die out. It will probably be possible to avoid this and other similar objections by a sliding scale, but the Board will reserve their views on this point until the Chamber of Commerce have reported.

(True Copies and Extract.)

(Signed) J. GROSE,
Secretary.

TRANSFERRED to the Public Works Department, with reference to G. O., 4th December 1873, No. 2,925.

(Signed) D. F. CARMICHAEL,
Secretary to Government, R.D.

27th January 1874.

No. 266. Proceedings of the Board of Revenue, dated 30th March 1874,
No. 718:—

Read the following letter from A. McC. WEBSTER, Esq., Acting Collector of Sea Customs, to J. GROSE, Esq., Secretary to the Board of Revenue, dated Madras, 3rd March 1874, No. 219.

I HAVE the honour to forward the reply of the Chamber of Commerce to my letter to them regarding the means of raising a revenue from the proposed Harbour at Madras.

2. The Board will observe that the Chamber consider my rates too high, and are of opinion that they would, if sanctioned, operate to restrict the calling trade of the port. They propose a tax of 8 Annas per ton on steamers and ships, and of 4 Annas per ton on coasting steamers and native crafts. The amount of

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revenue at these rates they estimate roughly at £20,000, leaving £16,000 to be raised by other means.

3. As regards the means of raising the balance of revenue, the Chamber do not give any definite opinion, and though apparently inclining to an *ad valorem* duty on goods, would defer making any proposal until they have ascertained the practice obtaining at other ports.

4. They are, moreover, of opinion that, considering the advantages the Government will derive from the harbour, some portion of the cost of its maintenance should be contributed by Imperial funds.

5. They further state their opinion that, when the harbour is completed, it will not be necessary to provide such a large sum as is now collected for the Port Fund, as they apprehend that the present Marine establishment will be capable of reduction.

6. If the proposal to levy a single tax on the shipping will have the effect anticipated by the Chamber of reducing the calling trade, it must be abandoned; for I fully concur with them that any measure calculated to bring about such a result cannot be too strongly deprecated.

7. The Chamber do not give any opinion on the question to which their attention was drawn, of charging ships according to a sliding scale. This would probably be a difficult matter to arrange; for it would either take the shape of a tax on the number of tons of cargo discharged or shipped, or of a tax for each day the ship remained in harbour, rising to the maximum recommended by me. The former is objectionable as involving weighment. The latter, though not open to that objection, I would not recommend, as we should, if we adopted it, be working in the dark. We could not possibly estimate the receipts of harbour dues in such a case, and we might at any time, and probably would, find our calculations upset by greater activity in shipping and unloading.

8. In the event of the proposal to charge a single rate on the shipping being abandoned—and I fear this must be given up—we shall be obliged to charge a tax on the goods as well. For the present, I will accept the Chamber's opinion that no more than £20,000 can be expected from the shipping. We shall require therefore to collect £16,000, or as much more in moderation as we can get from the goods. I say as much more as we can get, for there are sure to be many extra charges, which will be found necessary when the harbour is completed.

9. I cannot sufficiently insist on the great difficulty and disadvantages of collecting a tax on goods either by weighment or appraisement. I have but little to add to my remarks on this subject in my letter to the Board of the 27th January, except as regards the proposal to charge an *ad valorem* tax. I recommended the imposition of such a tax as being fairer and more equal in its incidence than a tax on the weight of goods, or number of packages; and if Government prepared to entertain a large additional establishment, and to greatly increase warehousing capacity of the Custom-house, we should be able to collect the tax.

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The Board are aware that at present we accept the valuation of free goods as given by the merchants, and that such goods are not appraised. They are not brought to the Custom-house, but are passed and shipped directly from the beach. If all such goods are to be charged with an *ad valorem* duty, we shall have to appraise them, and it will consequently be necessary to bring them into the Custom-house. It is not to be expected therefore that we could collect an *ad valorem* tax with our present establishment; and as Government will doubtless object to increase it, and to practically support a large number of officials at the expense of the trade of the port, I am afraid that this, the fairest method of collecting a revenue, must be abandoned.

10. The other proposal is to charge a tax on the weight of goods. We cannot, however, obtain the weight of goods by actual weighment, for this would at present necessitate nearly the same establishment and warehouse room as the collection of an *ad valorem* tax. We must therefore look for some means of ascertaining the weight of goods, which, without being absolutely correct, will be sufficiently accurate for all practical purposes, and will at the same time be capable of easy regulation.

11. The only method that appears to me to be at all practicable with our present, or with a very slightly increased establishment, is to collect a tax on the boat-load. The carrying capacity of all registered boats is known and is entered in the license, while the quantity of each class of goods that is estimated to make up a boat-load is specified in the Schedule* annexed to Government Notification, Marine Department, dated 14th October 1873. We have thus a tolerably accurate means of collecting a tax on the weight of goods.

12. Regarding the establishment and supervision necessary for collecting such a tax, I do not anticipate that any considerable increase in our present staff will be necessary. We shall not be able to dispense with the services of the Marine Police, and until the foreshore is reclaimed, a quay constructed, and the land side of the latter enclosed with a wall, we shall be obliged to continue the present practice of attaching a Police peon to every boat engaged in shipping or unloading cargo. These peons will help to check any breach of the rules as to the quantity of cargo allowed per boat, and as the number of boats loading and unloading at any one time is never very great, our present staff of Customs Peons ought to be sufficient to prevent any over-loading.

13. It would, of course, be necessary to provide for the boat owners being liable to heavy penalties for any breach of the rules as to the quantity of cargo to be carried, and for reward to be paid to informers, for there is no doubt that when a tax per trip is charged on the boat, it will be the shipper's interest to make the boats carry as heavy a load as possible, and in a close harbour, the encouragement to do so will be greater, as such over-loading will not be so dangerous as in an open roadstead.

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14. The charge for the Marine Police employed on the boats is at present collected in the Marine Police Office. A Register of the number of trips made by each boat is kept in the office, checks are established, and the charges are collected monthly from the boat owners. The boat-trip tax might be collected as the Police charges, only more frequently, or what would be better (as the Port Trustees would probably have to collect the harbour tax) a special but small establishment might be entertained for collecting the tax and registering the trips, the arrangements for checking remaining the same. An additional check would in this case be provided by the double register. This is, however, a matter of detail that does not at present call for any definite settlement. It is sufficient to observe that the cost of collection will not be excessive.

15. I will now proceed to submit an estimate of the revenue that we may look for from this source. I have had a

* Enclosure No. 2.

Return* prepared from the accounts of the Marine Police Office showing the number of trips made to and from the shore for the last five years by Masulah boats and by the large boats brought into use since the construction of the Pier. From this Return I estimate the tonnage of goods to be as follows:—

Note.—A Masulah boat-load is 2 tons—a large boat-load ranges from 12 to 14½ tons—the average carrying capacity for the five years being 13 tons.

	1869.	Trips.	Tons.	Tons.
Masulah boats to Beach	...	...	144,419 × 2	= 288,838
Do. to Pier	...	...	1,037 × 2	= 2,074
Large boats	...	...	188 × 14½	= 2,726
Total...				293,638
	1870.			
Masulah boats to Beach	...	...	108,267 × 2	= 216,534
Do. to Pier	...	...	7,640 × 2	= 15,280
Large boats	...	...	2,569 × 14½	= 37,250
Total...				269,064
	1871.			
Masulah boats to Beach	...	...	88,362 × 2	= 176,724
Do. to Pier	...	...	11,419 × 2	= 22,838
Large boats	...	...	4,090 × 13	= 53,170
Total...				252,732
	1872.			
Masulah boats to Beach	...	...	104,165 × 2	= 208,330
Do. to Pier	...	...	1,783 × 2	= 3,566
Large boats	...	...	1,912 × 13	= 24,856
Total...				236,752

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	1873.		Trips.	Tons.	Tons.
Masulah boats to Beach...	...	...	98,507 × 2 =	197,014	
Do. to Pier ...	...	...	2,658 × 2 =	5,316	
Large boats ...	...	...	2,075 × 12 =	24,900	
Total...				227,230	

The above figures give an average annual tonnage of goods carried by boats of 255,883 tons.

16. I must observe, however, that according to the practice obtaining at present, a double charge for Policemen is imposed on those boats, which, taking a cargo from the shore, remain more than an hour alongside the ship. Some of these boats, of course, return empty, and the register of trips cannot therefore be accepted as showing the actual number of trips made by laden boats. I have, however, consulted with Mr. Pryce, the Superintendent of Marine Police, and that officer is of opinion that taking one day with another, not more than fifteen boats per diem are charged the double Police rate without having a double cargo. This for 365 days—fifty-two Sundays and three holidays—gives $310 \times 15 = 4,650$ boat-trips per annum, or about 4 per cent. on the average number of trips for the last five years, viz., 115,818. The Masulah boats, moreover, are only allowed to carry $1\frac{1}{2}$ tons of dead-weight, and the large boats in proportion, so it will be necessary to correct the above average for the dead-weight tonnage as well as for the percentage of trips made by empty boats. On a rough estimate about 10 per cent. of the trade of the port may be classed as dead-weight. We may therefore estimate the actual tonnage as follows :—

	Tons.
Average for five years ...	255,883
Deduct 14 per cent. or 10 per cent. for dead-weight correction and 4 per cent. for empty trips ...	35,823
Net average tonnage...	220,060

A harbour tax of 12 Annas a ton on this amount would yield Rupees 1,65,045, or rather over the £16,000 required. This sum would amount to about one-sixth per cent. on the value of the trade including treasure.

17. I may here observe that my estimate of tonnage, prepared from the number of trips made by the boats, very nearly approximates to that given in my letter of the 24th January, which was prepared from the Custom House Returns of the trade. The Custom House Return being prepared for the official year 1872-73, I have, in making the comparison, taken the average tonnage for the calendar years 1872 and 1873 :—

	Tons.
Tonnage from Custom House Returns excluding timber and Railway materials ...	203,625
Estimate of average tonnage for 1872 and 1873 ...	231,992
Deduct 14 per cent. or 10 per cent. for dead-weight, and 4 per cent. for trips when empty...	32,478
	199,514

It cannot be expected that such estimates when not based on actual measurement can be very accurate. We can only approximate, but the comparison I have made will show the Board that we cannot be very far wrong in our estimate. If