

4. 12-7-88 No 4073 M

No 2476C. 27.2.7.88

Inv: No 15741/11. 26.5.88

Revenue 1888. De M  
Court of Wards,  
MADRAS.

No 5042

No 2479 W of M August 1888

Communicated to the  
Communicated to the

Happy Engineer to Circle with  
reference to his letter No 2600  
dated 25th Jan 1888.

2 The amount allotted in  
includes the percentage charge  
for Establishment.

Mh  
9/10/88

To

The P.W.D. this the  
Ley to put N.D.

Recd 7.8.88

26 JUL 88  
GOVERNMENT OF MADRAS  
PROCEEDINGS, dated 24 July 1888

No. 1617.

Enclosures.

Subject.  
Sanction an additional allotment  
of Rs 323 for the execution of  
certain works in the Government  
estate.

No 2479 W of M August 1888  
Endorsement No 4576.

Forwarded.

Col. C. L. S.  
of Secy. Genl.

Noted and  
14 August 1888

To The Public Works Dept

MILITARY DEPARTMENT, 14TH JUNE 1888, No. 3972.

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

Establishments.

Read the following paper:—

No. 247. Circular Memorandum from Lieutenant-Colonel E. COLLEN, Secretary to the Government of India, Military Department; dated Fort William, the 16th May 1888, No. 1210-C.

Establishments—Departmental.

With reference to the memorandum from the Military Department, No. 1266-D, dated 20th August 1879, ordering that when a Government servant is dismissed the charge against him should be reduced to writing, it is to be considered that the order applies to men discharged for inefficiency as well as to those dismissed for misconduct or any other cause.

2. In most cases the circumstances which are evidence of inefficiency are as capable of being reduced to writing as the circumstances which are evidence of an offence, and the explanation of the Government servant it is proposed to discharge should be received and considered before the order for his discharge or dismissal is passed.

3. There may be occasional cases of a peculiar kind where it may not be possible to follow the above course; such cases are to be dealt with in the spirit of the orders on the subject. It would defeat the object of the orders of the Government of India if dismissals for inefficiency were admitted without the enforcement of the prescribed precautions so far as they can be applied.

No. 1210-C.

Copy forwarded for information to the Secretary to the Government of Madras, Military Department.

(By Order.)

FORT WILLIAM,  
16th May 1888.

(Signed) E. G. BARROW,  
Asst. Secy. to the Govt. of India.

No. 248. ORDER THEREON, 14th June 1888, No. 3972.

No. 4787, dated 29th August 1879.  
No. 6795, dated 19th December 1883.

Communicated for guidance to Military Departments generally, in continuation of the Proceedings of Government marginally noted.

(True Extract.)

A. Kenney Herbert  
Brigdr.-Genl.,  
Secretary to Government.

To the Adjutant-General.

- „ Quarter Master General.
- „ Judge Advocate-General.
- „ Commissary-General.
- „ Inspector-General of Ordnance.
- „ Superintendent, Army Clothing.
- „ Superintendent of Pensions.
- „ Superintendent, Reserve Remount Depot, Hosur.
- „ Surgeon-General, Her Majesty's Forces, Madras.
- „ Controller of Military Accounts.
- „ Surgeon-General with the Government of Madras.
- „ Military Secretary to His Excellency the Commander-in-Chief.
- „ Public, &c., Departments.
- „ Revenue Department.
- „ Public Works Department.

Exd. E. C. Shunker.

2001-20-10-07  
2585-22-9-07  
2730-4-11-04

P. M. C. No. 7450

Gobt. of (1888) Madras.  
MILITARY.

To THE ADJUTANT-GENERAL,  
&c., &c., &c.

Dated June, 14th.

Issued

Recd. 30-7-88- Encl.

G.O., 14th June 1888, No. 3972.

No. 24,80 Wd/14 August 1888

JUNE.  
Nos. 247-248.

Establishments.

Government servants.—Intimation from the Government of India that the order of that Government requiring the charge against — dismissed for misconduct or any other cause to be reduced to writing applies also to men discharged for inefficiency.

18TH JULY 1888, No. 720, PUBLIC.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper :—

G.O., dated 14th June 1888, No. 3972, Military.

Read—the following Circular Memorandum from Lieutenant-Colonel E. COLLEN, Secretary to the Government of India, Military Department, dated Fort William, the 16th May 1888, No. 1210-C :—

With reference to the memorandum from the Military Department, No. 1266-D, dated 20th August 1879, ordering that, when a Government servant is dismissed, the charge against him should be reduced to writing, it is to be considered that the order applies to men discharged for inefficiency as well as to those dismissed for misconduct or any other cause.

2. In most cases, the circumstances which are evidence of inefficiency are as capable of being reduced to writing as the circumstances which are evidence of an offence, and the explanation of the Government servant it is proposed to discharge should be received and considered before the order for his discharge or dismissal is passed.

3. There may be occasional cases of a peculiar kind where it may not be possible to follow the above course ; such cases are to be dealt with in the spirit of the orders on the subject. It would defeat the object of the orders of the Government of India if dismissals for inefficiency were admitted without the enforcement of the prescribed precautions so far as they can be applied.

No. 1210-C.

Copy forwarded for information to the Secretary to the Government of Madras, Military Department.

\* \* \* \* \*

(By order.)

FORT WILLIAM,  
16th May 1888.

(Signed) E. G. BARROW,  
Asst. Secy. to the Govt. of India.

27/7/88

Recd. 27/7/88

Order—dated 14th June 1888, No. 3972, Military.

No. 4787, dated 29th August 1879.  
 „ 6795, „ 19th December 1883.

Communicated for guidance to Military departments generally, in continuation of the Proceedings of Government marginally noted.

(True Extract.)

(Signed) A. KENNEY-HERBERT, Brigdr.-Genl.,  
*Secretary to Government.*

To the Adjutant-General.  
 „ Quartermaster-General.  
 „ Judge Advocate-General.  
 „ Commissary-General.  
 „ Inspector-General of Ordnance.  
 „ Superintendent, Army Clothing.  
 „ Superintendent of Pensions.  
 „ Superintendent, Reserve Remount Depôt, Hosúr.  
 „ Surgeon-General, Her Majesty's Forces, Madras.  
 „ Controller of Military Accounts.  
 „ Surgeon-General with the Government of Madras.  
 „ Military Secretary to His Excellency the Commander-in-Chief.

ORDER—dated 18th July 1888, No. 720, Public.

Communicated to heads of departments under the control of the Chief Secretary to Government, in continuation of G.Os., Public, No. 1373, dated 23rd September 1887, and No. 18, dated 7th January 1888.

(True Extract.)

*W. Davidson*  
*in charge Secretary P. N. D.*  
*for Ag. Chief Secretary.*

To all Heads of Departments.  
 Copy to the Revenue Department.  
 „ „ Public Works Department.

Exd. A. Raiff.

334 W-27-1-88  
 2801 W-20-10-87  
 2730 W-6-11-84.  
 2604 W-17-12-83.

11-5-15

Ans 94502  
7642

P.W.C. No 7642

Gobt. of 1888 Madras.  
PUBLIC.

No. 450 W of 11 August 1888  
P.B.

Communicated  
to officers of the P.W.  
Department in continuation  
of G.O. No 334 W dated  
27th January 1888

13. S.C.

Issued

Recd. 3. 8. 88

Encl.

G.O., 18th July 1888, No. 720.

JULY.

Public Servants.

Communicating to heads of departments under the Chief Secretary Government of India Circular Memorandum intimating that the order of that Government requiring the charge against — dismissed for misconduct or any other cause to be reduced to writing applies also to men discharged for inefficiency.

Ch: E. for J. 25C  
Ch: E. for J. 25C  
Cons: E. for J. 25C  
S. E. for J. 25C  
C. A. for J. 25C  
C. S. for J. 25C

15/8  
17/8  
18/8

Current 671

CHIEF SECRETARY  
16 JUL 88  
MADRAS

To

THE CHAIRMAN HARBOUR TRUST BOARD,  
MADRAS.

SIR,

I have the honor to address you on the subject of the vexed question of the entrance to the Madras Harbour. In doing so however I would explain that I write in my private capacity and not as Deputy Conservator of the Port.

I am aware and feel that in attempting to enter the arena of the discussion as between the Harbour Trust Board and the Marine Engineers of the highest world wide reputation, who are I believe the advocates of the Eastern Entrance, I feel that I am treading on forbidden ground and am a trespasser "pur et simple."

But at the onset I would premise that my object is to throw oil on the troubled waters of this discussion and propose a compromise between the conflicting parties by suggesting an alternative plan, which is not in accord with the proposers of a N E Entrance, nor with those of a S E Entrance, and yet is not altogether antagonistic to the views of those Marine Engineers who advocate the retention of the present Easterly Entrance.

A reference to the accompanying chart of the Madras Roadstead, with a rough sketch of my proposed harbour entrance, and change of plan will I trust elucidate these remarks sufficiently.

There may be objections financial, nautical, and technical raised to the plan proposed herein by the advocates of the North-East Entrance, but not by those of the South East, and Easterly Entrances, for the entrance proposed may be said to be both a South East and Easterly Entrance.

I do not anticipate that there will be any objection on the score of extra expenditure. The advocates of the purely Eastern Entrance as it is at present may raise objections on this score, but they can be easily met with the objections already taken by the advocates of the North East Entrance; while the latter in turn cannot, either, take any objections on the same score of expenditure, as the protecting arm proposed by them to the North East Entrance, and the cost of filling up the present Easterly Entrance will be much more than the increase proposed by me in the North and Easterly wall; while the work of clearing away the debris in the North East gap can under my plan be executed at leisure, after the harbour has been constructed, and not before as in the case of the North East Entrance; (the creation of which is entirely dependant on the clearance of a fairway channel in the old wall) an advantage which I believe will be considered a desideratum, and an object gained, in the views of the Engineers charged with the construction of the Harbour.

I do not think that any nautical objections can be raised to my proposal as I am prepared with Mr. Corfield the Senior Pilot's assistance to practically refute and remove any such objections, by laying down buoys to indicate the lines of the proposed Harbour Wall, in order that vessels may be brought in and taken out within

the lines of the buoys. I have as yet abstained from showing the proposed plan to any of the Commanders of the Mercantile Marine, as I would rather their opinions were obtained by the Harbour Trust Board, independently of myself. I am not aware of the nature of the evidence adduced by Nautical men before the Committee which sat in London on the North East Entrance, as I have not seen any of the papers, so that I am unaware whether any Nautical objections were or were not raised to it, but I wish it distinctly to be understood that I am not posing as an opponent of the North East Entrance, but my object as stated in the opening para of this letter is to effect a compromise between the advocates of all three Entrances so as to effect a speedy completion of the Madras Harbour; and as I am about to retire from the Service my motives in so doing are entirely disinterested.

Having referred to the financial and nautical objections that may be raised to my proposal I will now make a few remarks as to what I have called technical objections i. e. objections likely to be raised by Marine Engineers in England, or by those in charge of the construction here. The grand objections to the North East Entrance on the part of the Engineers, judging from scraps I have read in the newspapers, is the impracticability and expense of raising and clearing away the debris from the old wall, deep enough for a new entrance. I notice in the Fort St. George Gazette in the proceedings of the Harbour Trust Board that Sir Guiford Molesworth has proposed a Southerly or South East Entrance, and that the Board have objected to his plan on the score of increase of expenditure which would be incurred by the necessity for taking up a large portion of the new work recently constructed at the head of the South arm. In regard to this objection I would observe that no such expenditure need be incurred with the South Groyne at all, and not with the North arm until after the completion of the Harbour, when the operation of lifting or blasting the blocks and debris can be performed in still smooth water, and at leisure.

There may be another objection taken by the Engineers to the overlapping principle of wall and that is that it may prove a trap for the sand being carried in suspension by the littoral current past the Entrance of the Harbour. But I am of opinion from narrowly watching the action of the sea and currents for many years past, and ever since the first construction of the Harbour, that no such action need be anticipated, and that the sand in suspension will be as now deposited against the South arm, and carried away past the proposed Entrance.

The change of Entrance to the North East was first discussed in Committee under the Presidency of Colonel Sankey R. E. in April 1883. The alternative plan then recommended was 1st the closing of the Eastern Entrance; 2nd the creation of and blowing up by Dynamite, and ultimately dredging out a new North East Entrance 500 feet wide; 3rd the construction of a protecting arm 600 feet long; the random block system of construction being maintained, and the work to cost Rs. 51,42,636.

Now in the plan proposed by me the only change suggested is an increase of the North and Eastern Wall of the harbour in order that by this means the Eastern Entrance may be protected. The difference in the cost of restoring the harbour on the old plan with the Eastern Entrance unprotected and mine, being a length of wall of about 600 feet; while the cost of closing the present Eastern Entrance and mak-

ing a new one to the North East will be saved. There is of course the cost of eventually clearing away the old North and Eastern Wall which must be added to the Estimate, but against which may be set off the cost of the North Arm and the cost of the new Entrance.

The advantages I claim for the plan proposed by me are that it will prove to be.

- 1st. A Harbour of refuge for Shipping in a Cyclone.
- 2nd. That the means of ingress and egress will be quite as feasible as those pertaining to the North East or Easterly Entrance.
- 3rd. A greater area of harbour space and more room for berthing ships will be gained, together with a wider entrance in deep water.

With regard to the first point I need hardly observe that all our Cyclones travel up from South East to East South East, and that the initial winds with which they are ushered in vary from North West to North East, but always blow from the Northern quadrant of the Compass. The greatest danger to the Shipping is to be apprehended when the vortex of a storm about to strike the coast is likely to pass to the Southward of the port, when the wind in accordance with the Law of Storms must veer from North to South by East, at which latter point the wind and sea are most dangerous to our Shipping which are then placed on a dead lee shore. The winds blowing from these points of the Compass may be said to form the most dangerous or advancing quadrant of the storm, and it is evident that with a protecting arm from the North wall extending across the Eastern Entrance, and plumb-ing say the Madras Pier End, or the East by South  $\frac{1}{2}$  South point of the compass must afford absolute shelter to ships within the harbour. When the wind has veered to East we know that the vortex has reached the Coast, and when it is East South East that it has gone inland of Madras when the port will experience winds from East to South which are the tail winds of a Cyclone, or the latter half of the storm and which may be expected to abate every hour to a light breeze. It is during this latter half of the storm that the Entrance to the harbour proposed will be exposed but not to a greater extent than for 300 feet of the width. But to ships inside the harbour at this part of the storm the South arm must be sufficient protection. During the tempestuous months of May, November and December when Cyclones may occur at any time the sea inside the walls cannot possibly be affected by the sea outside until the first or dangerous half of the storm has passed.

A few remarks are necessary as to the feasibility of working ships inside and out by what will be a double entrance until the old wall is cleared away. I propose to have the outer entrance 600 feet wide from wall to wall i. e. from the Southernmost point of the Eastern arm to the Northernmost point of the Southern arm, which space I think any shipmaster or pilot will admit quite sufficient for even manœuvring a steamer if required. The inner entrance might easily be blown up to the extent of say 100 feet from its extremity, while the outer arm is in course of construction, and I will warrant that no more difficulty will be experienced in bringing or taking out vessels than at present. For instance the Currents which set right across the Entrance will be lost entirely as there will be no set from the Northward, and that from the Southward will be either ahead or astern of the vessel entering or leaving.

At present on the advent of a Cyclone ships are obliged to leave the harbour with the wind at North or North East, a heavy sea tumbling into the harbour, and a strong Northerly current setting across the Entrance. These conditions would all be altered under the new plan, and a Vessel leaving even after the storm had made good progress would find the inner entrance perfectly quiet, and the outer one comparatively smooth.

With reference to the 3rd advantage I would observe that I am given to understand that one of the objections taken to the North East Entrance is that in heavy weather in the North East Monsoon a vessel making the Entrance may drift into shoal water, an objection which cannot possibly be raised regarding the new plan as a vessel under similar conditions would enter the harbour in 8 fathoms of perfectly still water; and when the old North wall has been blown up or removed, room for berthing at least three extra steamers will have been gained.

To sum up, in conclusion, under the plan proposed by me the South arm would be carried to a completion just as at present.

The North arm would be projected outside of the old one to the East and South until it plumbd the Madras Pier, from which its point would bear East by South  $\frac{1}{2}$  South, and stand at a distance of 600 feet from the extreme end of the South arm, and thus form an entrance facing South, 600 feet wide. Before the completion of the North and Easterly arm 100 feet of the old wall to be blown up, so as to afford an inner entrance 650 feet wide, until the whole wall is gradually demolished and removed, when a more capacious harbour will be obtained, and vessels be enabled to be moored to screw mooring buoys (not on the spindle system) with about 4 or 5 fathoms of their own chain cable, stem and stern, in which way I calculate that at least 10 large steamers will be provided for.

So long as the inner North wall remains, a system of lighting all three heads must be devised and maintained; say a red light on the old arm, and two good white lights on the South and Eastern heads.

With the foregoing remarks which I have endeavoured to make as brief and clear as possible, I leave the subject in the hands of the Harbour Trust Board who will doubtless obtain the valuable opinion of Mr. Thorowgood upon it before his departure from Madras.

I have the honor to be,

Sir,

Your Obedient Servant,

T. E. MARSHALL

Madras  
11<sup>th</sup> July 1888

To,

J. Price Esq.

Ag. Chief Secretary to Government  
With the Governor

Storehouse Hill

With T. E. Marshall's compliments