1243/6

M.R.O. 1—20,002—12-8-65.

(1) Number of Pages 16

(2) Date of repair 25-1-67

(3) Initials of the Reference

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	1243	Press
~~B.P. No.~~		Mis.

Dated 30-9-1874 ~~196~~ .

Not to be folded or roughly handled

No. 277. Read the following despatch from the Right Honorable the Secretary of State for India :—

Revenue (Forests)
No. 3.

INDIA OFFICE, LONDON,
20th August 1874.

MY LORD,—I forward, herewith, for the information of your Excellency in Council, copy of a letter from Colonel Beddome, Inspector of Forests, on leave, addressed to this office, on the subject connected with his visit to certain dockyards in this country and with reference to his remarks about curved teak.

23rd July 1874.

2. His recommendation that Mr. Fergusson should before leaving England visit the Chatham and Sheerness Dockyards will be duly attended to.

I have, etc.,
(Signed) SALISBURY.

His Excellency the Right Honorable
The Governor in Council, Fort St. George.

ENCLOSURE No. 1.

From Lieutenant-Colonel R. H. BEDDOME, Inspector of Forests, Madras, to the Under Secretary, Revenue Department, India Office, dated London, 23rd July 1874.

I HAVE the honor to inform you that, in accordance with sanction received from the India Office, I have visited the Government dockyards at Chatham, Sheerness, Pembroke, and Devonport, and I submit a bill for my local *[illegible]* travelling expenses, which I request you will get passed for payment and return to me.

2. The dockyards are well supplied with Burmah teak, which is obtained at prices varying from £13 to £16 per load of fifty cubic feet; it is all in squared logs with the heart-shake (centre of the tree) in the centre of each log; the consumption is very large in the construction of both iron armour-plated and of wooden vessels, and it would be still more used if the supply was equal to the demand or if crooked timber could be procured; but, as it is, Italian oak is more generally used for the frame-work of the wooden vessels.

3. Very little Malabar teak has ever found its way as yet to the Government dockyards; but I found the authorities connected with the Timber Department, both at Chatham and Devonport, fully aware of its great superiority over that of Burmah.

4. It is a question whether we could supply it with any profit from the Malabar Coast at the Burmah rates; but, when the sample supply already ordered has been tried and reported on, and when it is seen that we can, in most cases, supply it without the heart-shake in the centre of the log, and the greater elasticity and superiority of the Malabar wood is taken into consideration, I believe that the Admiralty will be ready to offer enhanced rates.

5. I found that Italian oak (*Quercus Sessiliflora*) costs nearly as much as teak, *viz.*, £10-5-0 to £13 per load; it is always full of cracks, which are often of large size, and which have to be filled up with lime and tallow, and it has been proved that it lasts less than half as long as teak; its only advantage is that it is obtained with the curve required for framing work and that it is a little cheaper.

6. To instance the greater durability of teak over Italian oak I may instance the following case brought to my notice at the Devonport Yard. The *Albion*, built of Italian teak in 1842 at Devonport, was repaired in that dockyard in 1862. Almost all her timbers were found to be in a rotten state, and new timber, to the value of £10,000, was required in her repair. In the same year, the *Bombay*, built in Bombay in 1828, was repaired also at Devonport, and there was hardly an unsound piece of wood found in her, or a piece taken out that was not put in again in some form or other.

7. I now come to the most important result of my visits to these dockyards, *i.e.*, the great importance of curved timber. All the authorities connected with the building of wooden vessels assured me that it would well repay them to give double the price for teak with the natural curve than for the straight logs as now always supplied from Burmah, and I would suggest that a copy of this letter should be forwarded to the Madras Government so that our department may be instructed to do all they can to secure the outturn of such timber from the naturally crooked and stunted teak which is often procurable in our less luxuriant teak tracts, and that experiments may be at once commenced in portions of our Nellumbur Teak Forests to induce a crooked growth when the saplings are young (one to three years' growth).

8. The most useful size and curvature for frames of ships would be logs of about ten feet in length with a siding from thirteen to fifteen inches at a curvature of about six or seven inches; extremes in length may, however, go up to eighteen or nineteen feet, and extremes in curvature up to eighteen or twenty-four inches; the maximum length should be nine feet, the minimum curvature three inches, and the minimum siding seven inches, but all intermediate sizes and curvatures will be of value.

9. For the backing of armour-plated vessels greater length and less curvature are required. Logs with a curvature of only three to twelve inches in lengths of from twenty-five to thirty-five feet, and sidings of from twelve to twenty inches, are most required, but the length may run up to forty feet; sidings should be uniform throughout each log.

10. Mr. Fergusson (one of my Assistants), the Scotch Forester in charge of our Nellumbur Teak Plantation, is at present on leave in England. It would be a very good plan if he could spend several days in both the Chatham and Sheerness Dockyards before his return to India and make himself fully acquainted with the sizes and curvatures required in timber used both in the iron-clads and wooden vessels, and if he would anywhere visit experiments for creating an artificial curved growth in young trees such as are carried on with some of the Italian oak trees.

No. 278. ORDER THEREON, 30th September 1874, No. 1,243.

Forest, No.

ORDERED that the foregoing despatch, with copy of its enclosure, be communicated to the Board of Revenue and Acting Inspector of Forests, and that the attention of those authorities be called to paragraphs 7 to 9 of Colonel Beddome's letter of the 23rd July 1874.

(True Extract.)

(Signed) C. G. MASTER,
Acting Secretary to Government.

To the Board of Revenue.
„ the Acting Inspector of Forests.

Ext. A. S. Rodgers.

India Office, London.
20th August, 1874.

Revenue (Forests)

No 3.

My Lord,

I forward, herewith, for the information of your Excellency in Council, copy of a letter from Colonel Beddome Inspector of Forests, on leave, addressed to this Office, on the subject connected with his visit to certain Dockyards

23rd July 1874

His Excellency
The Right Honorable
The Governor in Council
Fort St George

Govt. of Madras

1874

REVENUE.

To

THE BOARD OF REVENUE,
&c., &c., &c.

Dated September 30th.
Read

Encl.

G.O., 30th September 1874, No. 1,243.

SEPTEMBER.
Nos. 277-278.

Colonel Beddome's visit to certain Dockyards in England.—Communicating to Revenue Board and Acting Inspector of Forests papers received from the Secretary of State regarding —, and calling their attention to Colonel Beddome's suggestions to secure the outturn of crooked timber and to institute experiments in the cultivation of timber for shipbuilding.

Rec'd 18 Oct/74
No 3074.

Dockyards in this Country and with reference to his remarks about curved teak.

2. His recommendation that Mr. Fergusson should before leaving England visit the Chatham and Sheerness Dockyards will be duly attended to.

I have the honor to be,
My Lord,
Your Lordship's most obedient
humble Servant
Admiralty

1806

London - 23 July 1806

From Lt Col Reddome
Inspector of Fresh
Madras
To the Under Secy Mar Dept
India Office.

Sir,

I have the honor to inform you that in accordance with sanction received from the India Office; I have visited the Government Dockyards at Chatham, Sheerness, Rochester & Devonport, & I submit a bill for my bona fide travelling expences which I request you will get passed for payment & return to me.

2. The Dockyards are well supplied with Burmah Teak which is obtained at prices varying from £13 to £16 per load of 50 cubic feet: it is all in squared logs with the heart-shake (centre of the tree) in the centre of each log - the consumption is very large in the construction of both iron armour-plated & of wooden vessels; and it would be still more used if the supply was

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could be procured, but as it is, Chalian
Oak is more generally used for the frame
work of the wooden vessels.

3. Very little Chalian Oak has been
found its way as yet to the Home Dockyards,
but I found the architects connected
with the Under Dept, both at Chatham
& Deptford fully aware of its great ge-
neriority over that of Burmah.

4. It is a question whether we could
supply it with any perfect from the Malabar
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& reported on, & when it is seen that we
can, in most cases, supply it with Knee
the head-Knees in the Centre of the Ship, &
the Breaden elasticity & superiority of the
Malabar wood is taken into Consideration,
I believe that the Admiralty will be
ready to offer enhanced rates.

5. I found that Chalian Oak (Queens
Cosseliphum) cost nearly as much as
Teak, viz £10-5 to £13 per Load, &

it

is always full of cracks which are filled
up large size & which have to be filled up
with lime & Ballast, & it has been proved
that it lasts less than half as long as
Teak, - its only advantage is that it is
obtained with the curve required for
framing work & that it is a little cheaper.

6. To indicate the greater durability of
Teak over Chalian Oak I may instance the
following case brought to my notice at the
Deptford Yard. The "Albion" built of
Chalian Oak in 1842 at Deptford, was
repaired in that Dockyard in 1862. Almost
all her timbers were found to be in a rotten
state & new timber, to the value of £10,000
was required in her repair. In the
same year, the "Bombay" built in Bombay
in 1828, was repaired also at Deptford
& there was hardly an unsound piece
of wood found in her, or a piece taken
out that was not put in by previous re-
pairs from rot &c.

7. I have come to the most important
result of my visit to these Dockyards &c

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the great importance of curved timber. All the Authorities connected with the building of wooden vessels assured me that it would well repay them to give double the price for teak with the natural curve than for the straight logs as now always supplied from Burmah, & I would suggest that copy of this letter should be forwarded to the Madras Govt. so that our Dept may be instructed to do all they can to secure the supply of such timber from the naturally crooked & stunted teak which is often procurable in our less important teak tracts, and that experiments may be at once commenced in portions of our Nellumbur teak forests to induce a crooked growth when the saplings are young (1 to 3 years growth)

8. The most useful size & curvature for frames of ships would be logs of about ~~four~~ ten feet in length with a siding from 13 to 15 inches at a curvature of about 6 or 7 inches; extremes in length may however go up to 18 or 19 feet, & extremes in curvature up to 18 or 24 inches; the maximum length should be 9 feet, the minimum

curvature

curvature 3 inches & the minimum size 7 inches, but all intermediate sizes and curvatures will be of value

9. For the backing of armour plated vessels greater length & less curvature are required. Logs with a curvature of only 3 to 12 inches in lengths of from 25 to 35 feet & sidings of from 12 to 20 inches are most required, but the length may run up to 40 feet. Sidings should be uniform throughout each log.

10. Mr Ferguson (one of my Assistants) the Scotch forester in charge of our Nellumbur Teak plantation, is at present on leave in England. — it would be a very good plan if he could spend several days in both the Chatham and Sheerness Dockyards before his return to India & make himself fully acquainted with the sizes & curvatures required in timbers used both in the iron clads and wooden vessels; & if he would carry out there experiments for creating an artificial Curved growth in young trees such as are carried on with some of the Italian oak trees.

I have &c,

(Sd) H. H. Beddome Lt Col

Inspector of Forests

No. 26.

Copy Letter from Colᵒ Beddome,
dated 23ᵈ July 1874.

Referred to in Revenue (Forest) Letter
Madras, No. 3, dated 20ᵗʰ Augᵗ 1874

217-278.

No. 25.

Revenue (Forests)
20th Augt. 1874.

The
Letter to Fort St. George
No. 3.

Recd. 19 Sept. 1874.

No 1243
Ordered that the foregoing Despatch with copy of its enclosure be communicated to the Board of Rev. and Inspector of Forests, and that the attention of those authorities be called to paras 7 to 9 of Col. Beddome's letter of 23 July 1874.

30 Sept 74

W. H. Board of Revenue
2 Inspr of Forests } Dec 7/10

Forwards copy of a letter addressed to the India Office by Colonel Beddome Inspector of Forests on the subject connected with his visit to certain dockyards in England & with reference to his remarks about curved Teak, and requests attention to his recommendation that Mr. Fergusson, now on leave in England, should visit the Chatham & Sheerness Dockyards & make himself acquainted with the sizes & curvatures required in timber used for making ships.