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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.
B.P. No.

874

Press
Mis.

Dated 30.6.1876 196

Not to be folded or roughly handled

No. 310. Read the following Proceedings of the Board of Revenue, dated 21st March 1876, No. 797, Forest No. 28 :—

Read again Board's Proceedings, dated 19th January 1876, No. 156.

Read also the following letter from Lieutenant-Colonel R. H. BEDDOME, Conservator of Forests, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 9th February 1876, No. 185 :—

IN forwarding the enclosed letter from Mr. Douglas, the Deputy Conservator of the Coimbatore Range, and the Collector's docket, to be communicated to Government through the Board of Revenue, I have the honor to inform you that I can endorse Mr. Douglas' statements; much of our Annamallai teak shows cracks and flaws, the result of heart shake, but this is inherent, and is not brought about from exposure, nor does the teak deteriorate from any exposure it is liable to in our depôts.

2. The question of saw *versus* axe in the preparation of our Annamallai teak is now under consideration, and I shall see that careful experiments are made. I am much afraid that the saw will be found very expensive even if it does turn out timber better adapted to the present market which I am inclined to doubt. The ripe teak trees in the Annamallais run from a girth of 10—12 feet up to 20 or even 22 feet, and they are often 60—80 feet long; trees of these dimensions must be worked up at the spot where they are felled, so that, if saw machinery was set up, they could not be conveyed to it, nor could saw machinery be moved about from place to place in the forests, so machinery appears out of the question, and we have only to consider hand-sawing *versus* the axe. This was tried systematically for a whole season by Colonel (then Lieutenant) Michael some time between 1850 and 1854, and he thinks that there must be some record of the experiments and the results in the Board's office, and I shall be obliged if search can be made for them; the result was a failure, the heart shake are introduced indiscriminately into all the logs, and the timber fetched a very much lower price than that prepared with the axe. Between 1857 and 1860 I myself tried the saw on a small scale, and had several trees worked up by it. I could only, however, procure very indifferent sawers. I found that the logs so turned out were thought so inferior by the dockyard authorities that they would only take them as rejected timber at Rupees 1-8-0 per cubic foot instead of 1st or 2nd class at Rupees 3 or Rupees 3-4-0. I calculated that I lost nearly 50 per cent. Both these experiments were, however, with reference to dockyard timber only; and, as our timber now will be chiefly taken by the Department of Public Works, we must have their opinion, and I am arranging to prepare timber in both ways for their inspection and report.

3. Any one not acquainted with the great size of the Annamallai teak trees, the peculiarities of the heart shake, and the great skill of the Palghaut axemen, would naturally laugh at the idea of the timber being prepared by the axe instead of by the saw; they would in the first place say that the waste must be enormous. I have never seen any where such skilled axemen as those of Palghaut; the trees are split up the centre by means of wedges and the planks or logs worked off the sides, and the wastage is often wonderfully little; there is a certain

*Proceedings of the Madras Government, Revenue Department,
30th June 1876.*

wastage of course, but, if the extra amount of timber obtained by using the saw is less than sufficient to cover the increased expenditure incurred by its use, it is of course practically better to submit to the wastage, and it must also be remembered that the teak timber at the spot where it is felled is only worth about 25 per cent. of its value when it reaches its market, a very different condition of things to what generally prevails in Europe. The saw turns out timber with a smoother surface which might demand a better price from the public at auction than the rougher exterior of axe-prepared timber, but the Department of Public Works would scarcely care about this. The axe-prepared timber has often no defects, and where there are any (and they depend much upon the care given in preparation, supervision, &c.) they are all apparent from the outside; the sawn timber has generally invisible defects inside, and does not saw up into small scantling so profitably.

ENCLOSURE No. 1.

From C. G. DOUGLAS, Esq., Deputy Conservator of Forests, Annamallai Range, to Lieutenant-Colonel R. H. BEDDOME, Conservator of Forests, dated Coimbatore, 25th January 1876, No. 289.

In accordance with an endorsement from the Collector of Coimbatore, No. 545, of 3rd December 1875, I have the honor to submit the explanation called for in G. O. of 22nd November 1875, Revenue Department, No. 2,453, respecting the deterioration of Annamallai timber at Beypore and Ponany, said to be due to preventible causes, *viz.*, defective storage and delay in selling.

2. I doubt whether the Officiating District Engineer of Malabar, who reports on my depôts, had an opportunity of inspecting the timber when it first arrived on the coast, and, in my opinion, it is no worse now than it was then.

3. The cracks and flaws noticed are for the most part inherent defects which it is the object of the method by which this timber was prepared to expose if it cannot eradicate. The timber is split or cleft planking, and is not sold by rough outside measurement, but after probing and making an allowance for every crack or knot visible. That which is paid for is thus sound and "very good and very well seasoned" as remarked by the Officiating District Engineer of Malabar, and used to fetch high rates from the Bombay Marine.

4. I do not think the wastage in sawing the timber would amount to 30 or 40 per cent. if the work were properly done.

5. The storage is the same as that employed for the same class of timber in the Bombay dockyards which I visited last year, and where I saw a large batch of Annamallai planks which reached the coast at the same time as these under notice; they exhibited no sign of deterioration, and, though not at present in much request for dockyard work, there was no intention of selling off.

6. Every effort has been made to dispose of the timber at a reasonable figure, and we are prepared to sell it now to the Department of Public Works at its current market value, but it is not wanted.

7. From the suggestion that all Annamallai timber should be offered to the Department of Public Works before it is despatched to the coast, there would seem to be some misapprehension as to why the timber now there was not in preference brought to Coimbatore.

8. All the timber now on the coast was sent down in 1872 as an annual instalment towards unusually large demands which arose in 1869-70 from the Bombay Marine. The cessation of these lucrative transactions which occurred soon after could not have been foreseen any more than the Department of Public Works indent for 600 tons annually, which only dates its commencement from 1874.

*Proceedings of the Madras Government, Revenue Department,
30th June 1876.*

9. Three hundred and five logs were certainly sent to the Ponany depôt this year from Mungarah, our floating station on the Ponany river near Palghaut, where they had been allowed to remain, not being urgently required at the coast, but the reason for not bringing this timber back to Coimbatore when it was so far on its westward route is fully explained in G. O., dated 4th October 1875, No. 1,457, Revenue Department.

10. I think a Forest Officer may not unreasonably expect to be communicated with before the depôts for which he is answerable are inspected and overhauled.

No. 26.

FORWARDED to the Board of Revenue, through the Conservator of Forests, with reference to the Proceedings, Board of Revenue, dated 19th January 1876. The Collector agrees with the Deputy Conservator that the defects noticed were inherent.

COIMBATORE,
31st January 1876.

(Signed) GORDON MACKENZIE,
for Collector.

THESE papers will be submitted to Government with reference to G.O., dated 22nd November 1875, No. 2,453.

2. It is explained that the timber alluded to in the Government Order above quoted was sent to the coast to meet demands from the Bombay Marine, and that it is not proposed to send any more timber to Ponany or Beypore, but to prepare it at the Annamallais. The defects commented on by the District Engineer, Malabar, are explained to be inherent, not due to deterioration from exposure, and the cause of their being so patent is attributed to preparation by the axe instead of the saw.

3. The results of Colonel Michael's experiments are given in his letters printed as Selections from the Records of the Madras Government, No. V.

4. The Board consider the Deputy Conservator's explanation perfectly satisfactory. It would have been better if the District Engineer, Malabar, had signified his intention of inspecting the depôts.

(True Copies and Extract.)

(Signed) C. A. GALTON,
Acting Secretary.

No. 311.

ORDER THEREON, 30th June 1876, No. 874.

Forest, No. 20.

HIS Grace the Governor in Council is satisfied, from the explanation now submitted, that the cracks and flaws

complained of by the District Engineer of Malabar were mainly inherent defects. At the same time the Government are of opinion that an allowance for loss in sawing of approximately 30 or 40 per cent. in well-prepared and carefully-seasoned timber is unduly great, especially when such timber has, it would seem, been prepared by skilled axemen. With the view of ascertaining what the average loss or wastage in sawing teak is, the Chief Engineer is directed to call on Captain Morant, District Engineer Nilgiris, for report on the subject, this officer having had considerable experience in working up quantities of teak from the forests lying within or adjacent to this dis-

*Proceedings of the Madras Government, Revenue Department,
30th June 1876.*

trict. It is to be remembered that the fact that cracks, &c., are allowed for at sale, though manifestly proper, results in a considerable loss to Government in the cost of carriage to market of the waste portion of the timber. This should as far as possible be avoided.

2. Although judging from the opinion of Colonel Beddome and the results of Colonel Michael's experiments, the use of the saw in first dealing with the felled tree is from several causes hardly to be commended, yet there can be little question that the saw may be applied with advantage by skilled sawyers to timber in later stages of treatment before it leaves the forest. The Government will be glad to learn the results of Colonel Beddome's experiments.

3. It is observed that the District Engineer not only inspected the depôts, but measured up all the timber without giving notice of his intention to the controlling officer of the Forest Department. Such action was highly irregular, and he will be so informed.

(True Extract.)

(Signed)

D. F. CARMICHAEL,
Secretary to Government.

To the Board of Revenue.
„ the Conservator of Forests.
„ the Chief Engineer.
„ the Public Works Department.

Exd. A. Grubert.

FOREST No. 28.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 21st March 1876, No. 797.

Read again Board's Proceedings, dated 19th January 1876, No. 156.

Read also the following letter from Lieutenant-Colonel R. H. BEDDOME, Conservator of Forests, to C. A. GALTON, Esq., Acting Secretary to the Board of Revenue, dated Madras, 9th February 1876, No. 185:—

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2. The question of saw *versus* axe in the preparation of our Annamallai teak is now under consideration, and I shall see that careful experiments are made. I am much afraid that the saw will be found very expensive even if it does turn out timber better adapted to the present market which I am inclined to doubt. The ripe teak trees in the Annamallais run from a girth of 10—12 feet up to 20 or even 22 feet, and they are often 60—80 feet long; trees of these dimensions must be worked up at the spot where they are felled, so that, if saw machinery was set up, they could not be conveyed to it, nor could saw machinery be moved about from place to place in the forests, so machinery appears out of the question, and we have only to consider hand-sawing *versus* the axe. This was tried systematically for a whole season by Colonel (then Lieutenant) Michael some time between 1850 and 1854, and he thinks that there must be some record of the experiments and the results in the Board's office, and I shall be obliged if search can be made for them; the result was a failure, the heart shake are introduced indiscriminately into all the logs, and the timber fetched a very much lower price than that prepared with the axe. Between 1857 and 1860 I myself tried the saw on a small scale, and had several trees worked up by it. I could only, however, procure very indifferent sawers. I found that the logs so turned out were thought so inferior by the dockyard authorities that they would only take them as rejected timber at Rupees 1-8-0 per cubic foot instead of 1st or 2nd class at Rupees 3 or Rupees 3-4-0. I calculated that I lost nearly 50 per cent. Both these experiments were, however, with reference to dockyard timber only; and, as our timber now will be chiefly taken by the Department of Public Works, we must have their opinion, and I am arranging to prepare timber in both ways for their inspection and report.

3. Any one not acquainted with the great size of the Annamallai teak trees, the peculiarities of the heart shake, and the great skill of the Palghaut axemen, would naturally laugh at the idea of the timber being prepared by the axe instead of by the saw; they would in the first place say that the waste must be enormous. I have never seen any where such skilled axemen as those of Palghaut; the trees are split up the centre by means of wedges and the planks or logs worked off the sides, and the wastage is often wonderfully little; there is a certain

2!
Capt Morant has worked up large quantities of Annamallai teak logs - and can give a good estimate of the loss - He also states what the percentage is -

Cent

Board of 1876

REVENUE

THE BOARD OF REVENUE

No. 185

Dated June 30th

Recd.

Encl.

G.O. 30th June 1876, No. 874

JUNE
Nos. 819-871

Annamallai Teak in Coimbatore District.
Passing orders on Board's Proceedings submitted in
explanation from Deputy Conservator of Forests
regarding deterioration of —



wastage of course, but, if the extra amount of timber obtained by using the saw is less than sufficient to cover the increased expenditure incurred by its use, it is of course practically better to submit to the wastage, and it must also be remembered that the teak timber at the spot where it is felled is only worth about 25 per cent. of its value when it reaches its market, a very different condition of things to what generally prevails in Europe. The saw turns out timber with a smoother surface which might demand a better price from the public at auction than the rougher exterior of axe-prepared timber, but the Department of Public Works would scarcely care about this. The axe-prepared timber has often no defects, and where there are any (and they depend much upon the care given in preparation, supervision, &c.) they are all apparent from the outside; the sawn timber has generally invisible defects inside, and does not saw up into small scantling so profitably.

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From C. G. DOUGLAS, Esq., Deputy Conservator of Forests, Annamallai Range, to Lieutenant-Colonel R. H. BEDDOME, Conservator of Forests, dated Coimbatore, 25th January 1876, No. 289.

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2. I doubt whether the Officiating District Engineer of Malabar, who reports on my depôts, had an opportunity of inspecting the timber when it first arrived on the coast, and, in my opinion, it is no worse now than it was then.

3. The cracks and flaws noticed are for the most part inherent defects which it is the object of the method by which this timber was prepared to expose if it cannot eradicate. The timber is split or cleft planking, and is not sold by rough outside measurement, but after probing and making an allowance for every crack or knot visible. That which is paid for is thus sound and "very good and very well seasoned" as remarked by the Officiating District Engineer of Malabar, and used to fetch high rates from the Bombay Marine.

4. I do not think the wastage in sawing the timber would amount to 30 or 40 per cent. if the work were properly done.

5. The storage is the same as that employed for the same class of timber in the Bombay dockyards which I visited last year, and where I saw a large batch of Annamallai planks which reached the coast at the same time as these under notice; they exhibited no sign of deterioration, and, though not at present in much request for dockyard work, there was no intention of selling off.

6. Every effort has been made to dispose of the timber at a reasonable figure, and we are prepared to sell it now to the Department of Public Works at its current market value, but it is not wanted.

7. From the suggestion that all Annamallai timber should be offered to the Department of Public Works before it is despatched to the coast, there would seem to be some misapprehension as to why the timber now there was not in preference brought to Coimbatore.

8. All the timber now on the coast was sent down in 1872 as an annual instalment towards unusually large demands which arose in 1869-70 from the Bombay Marine. The cessation of these lucrative transactions which occurred soon after could not have been foreseen any more than the Department of Public Works indent for 600 tons annually, which only dates its commencement from 1874.

9. Three hundred and five logs were certainly sent to the Ponany depôt this year from Mungarah, our floating station on the Ponany river near Palghat, where they had been allowed to remain, not being urgently required at the coast, but the reason for not bringing this timber back to Coimbatore when it was so far on its westward route is fully explained in G. O., dated 4th October 1875, No. 1,457, Revenue Department.

10. I think a Forest Officer may not unreasonably expect to be communicated with before the depôts for which he is answerable are inspected and overhauled.

No. 26.

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COIMBATORE,
31st January 1876.

(Signed) GORDON MACKENZIE,
for Collector.

THESE papers will be submitted to Government with reference to G.O., dated 22nd November 1875, No. 2,453.

2. It is explained that the timber alluded to in the Government Order above quoted was sent to the coast to meet demands from the Bombay Marine, and that it is not proposed to send any more timber to Ponany or Beypore, but to prepare it at the Annamallais. The defects commented on by the District Engineer, Malabar, are explained to be inherent, not due to deterioration from exposure, and the cause of their being so patent is attributed to preparation by the axe instead of the saw.

3. The results of Colonel Michael's experiments are given in his letters printed as Selections from the Records of the Madras Government, No. 11.

4. The Board consider the Deputy Conservator's explanation perfectly satisfactory. It would have been better if the District Engineer, Malabar, had signified his intention of inspecting the depôts.

(True Copies and Extract.)


Acting Secretary.

To the Secretary to Government, Revenue Department.

.. Conservator of Forests.

Copy to the Collector of Coimbatore.

.. to the Collector of Malabar, with copies of Board's Proceedings,

dated 29th November 1875, Miscellaneous No. 10,678

and 19th January 1876, No. 156.

Ed. A. Grubert.

Cent

2/6

Revenue Departments

No

Proceedings Madras Government
Under date the 1st June 1876.

Read the following
Proceedings of the Board
of Revenue

Submitting explanation
regarding deterioration of An.
Namallai Teak sent to Western
Coast to meet demands from
the Bombay Marine. (Here enter 21 March 76)

His Grace the G.
vernor in Council is satis-
fied from the explanation
now submitted that the
cracks and flaws com-
plained of by the District
Engineer of Malabar
were mainly inherent
defects ~~and not the re-~~
~~sult of exposure.~~ At the
same time the Govt are
of opinion that an allowance
for loss in sawing of
approximately 30 or 40 per
cent

I think it will be well to ask
Morant what loss there is on
Maddamallai teak

L.O. 4000/1758 26-27
22 November 24534

No 1370

Revenue 1876. Office
Board of Revenue
MADRAS.

PROCEEDINGS, 21st MARCH 1876, No. 797.

20/3/76

20/3/76

Received 5th April 76

MARCH.
Forest No. 28.

Anomallai Teak—in Coimbatore District
sent to Western Coast to meet demands from
the Bombay Marine.—Submitting to Govern-
ment explanation from Deputy Conservator of
Forests regarding deterioration of—

310

22 June 76 227/6

cent in well prepared
and carefully seasoned
timber is unduly great
especially when such
timber has, it would seem,
been prepared by ~~the~~
axe-men, ~~whose~~
manipulation of logs ap-
pears to reduce the
loss from heart-shake
to a ~~minimum~~.

The fact that the cruet's
are allowed for
at sale, tho' manifestly
proper, results in a
considerable
loss to Govt of
the cost of carriage to
market of the waste
portion of the timber.
This should as far as
possible be avoided.

2 Although judging
from the results of Col
Michael's experiments,
the use of the saw in
first dealing with the
felled tree is from several
causes

With the view of ascertaining
what is the average loss in
sawing timber, the Chief
Engineer is directed to
call on Capt. Morant, Mr.
Ry. Riley, for report
on the subject, - this Officer
having had considerable
experience in working
up quantities of timber
from the Mundakalla

The opinion of Col Paddon

is to be immediate that
the Forests lying within or
adjacent to this Dist. - It
is to be immediate that

order
copy as amended
9

causes hardly to be
commended, yet there
can be little question
that the saw ~~can~~ ^{may} be
applied with advantage
to timber in later stages
of treatment before it
leaves the Forest. The
Govt will be glad to
learn the results of
Col. Paddon's experiments.
~~The first experiment for~~
success will be the em-
ployment of a skilled
sawyer.

3. It is observed that
the District Engineer not
only inspected the Depots
but measured up all
the timber without
giving notice of his
intention to the Controlling
Officer of the Forest Dept.
Such action was highly
irregular & he will be so informed
H F

Oct 20

820/36

Revenue Department

at 874

Proceedings of the Madras Government
Under date the 30th June 1876

Read the following
Proceedings of the Board
of Revenue

Submitting explanation re.
garding deterioration of a
small alluvial bank sent to Western Coast to meet demands from
the Bombay Marine. (Here enter 21. March 76
No 797)

His Grace the Governor
informed is satisfied, for
the explanation now sub-
mitted, that the cracks and
flaws complained of by
the District Engineer of
Malabar were mainly
inherent defects. At
the same time the Governor
are of opinion that an
allowance for loss in
sowing of approximately
30 or 40 per cent in
well

June 76 At 27. June

well prepared and carefully
seasoned timber is unduly
great especially when such
timber has, it would seem
been prepared by skilled
axe-men. With the view
of ascertaining what the
average loss or wastage
in sawing oak is, the
Chief Engineer is directed
to call on Captain Morant
District Engineer Kilgus
for report on the subject.
This Officer having had
considerable experience
in working up quantities
of oak from the Forests
lying within or adjacent
to this District. It is
to be remembered that the
fact that cracks &c are
allowed for at sale,
this manifestly proper,
results in a considerable
loss to Government in the
cost of carriage to market.

of the waste portion
of the timber. This should
as far as possible be
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2. Although judging
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Beddome & the results of
Col. Michael's experiments,
the use of the saw in
first dealing with the
felled tree is from some
real causes hardly to
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can be little question
that the saw may be
applied with advantage
by skilled sawyers to
timber in later stages
of treatment before it
leaves the Forest. The
Government will be glad
to learn the results of
Col. Beddome's experience.

3. It is observed
that the District Engineer
not only inspected the

Depot

