

1923

KENYA

11

C O  
9973

FROM  
HAMMOND, COL: F. D.

DATE  
21ST FEBRUARY 1923

REC'D  
26 FEB 23

FOR CIRCULATION :-

SUBJECT

RAILWAY SLEEPERS (WOOD & STEEL)

Mr.

Mr.

Mr.

Asst. U.S. of S.

+ Submits  
27/2/23

Submits observations on report of local Committee. Not justified in recommending bulk of sleepers should be obtained locally but 6,000 to 8,000 might be tried on new lines as a test.

Perm<sup>t</sup> U.S. of S.

Part<sup>r</sup> U.S. of S.

Secretary of State.

Previous Paper

89  
7077  
13

MINUTES

The difference in date is explained by the fact that Col. Hammond brought his 148. to the office here, & the said letter was returned for report. I have copies now made & will

When he asked Col. Hammond why he was unable to understand the local operations committee and that it had been suggested to send the Commission they desired.

His own suggestion, in the last para., is open to the criticism that the reports of the experiments would not be available for many years.

Copy to Gen. 374. come 1 number.

Subsequent Paper

500  
12813

? Copy of comm. with CA + Col. Hammond to Gen.; say that

that the S. of H. is not satisfied, so far as he has been able to understand the information given; that any adequate economy would be approved, and that, while appreciating the desirability of providing local employment, that consideration, & the relatively small economy in immediate expenditure, should not be allowed to outweigh the importance of avoiding the risk of having to replace the motor sloops in a few years.

Ask as to

- (1) Whether <sup>at least</sup> ~~proceedings~~ or ~~proceedings~~ will be used
- (2) Whether bearing places will be used
- (3) What terms have been obtained for crewing
- (4) Whether sufficient timber is available not only for the initial sloping but also for repairs.
- (5) As to the alleged...

that the S. H. is not  
subsidized, in fact as he  
has been able to understand  
the information given, that  
any adequate economy would  
be required, and that, while  
appreciating the desirability  
of providing local employment,  
that consideration, & the  
retaining small economy  
in immediate expenditure,  
should not be allowed to  
outweigh the importance  
of avoiding the risk of  
having to replace the  
three sloops in a few  
years.

Ask or to

- (1) Whether post-graduate or  
post-graduate <sup>courses</sup> will be used
- (2) Whether training places  
will be used
- (3) What terms have been  
obtained for occupying
- (4) Whether sufficient  
is in sight not only for  
the initial sloping  
but also for maintenance.
- (5) What the cost of

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of avoiding the risk of  
having to replace the  
three sloops in a few  
years.

Ask as to

- (1) Whether ~~proceedings~~ <sup>alternatives</sup> or  
proceedings will be used
- (2) Whether bearing plates  
will be used
- (3) What terms have been  
obtained for carrying
- (4) Whether sufficient time  
is available not only for  
the initial clearing  
but also for renewals.
- (5) What the alleged value

United Service Club,  
 Pall Mall, S.W.1.  
 21st February, 1923.

C O  
 9973

Rec<sup>d</sup>  
 Ref 26 FEB 23

Sir,

With reference to your letter <sup>80</sup>7079/23 of the 16th instant enclosing correspondence on the subject of <sup>Kenya</sup> the use on the East African railways of sleepers made from local timber in preference to steel, it is not clear from His Excellency the Governor's despatch whether it is proposed to use the soft wood, *Podocarpus*, or the hard wood, *Maharagi*, although from paragraph 18 of the Resident Engineer's letter he appears to recommend the latter.

In none of the letters concerning from East Africa is it definitely stated that *Maharagi* timber has been successfully impregnated with creosote nor are any details given as to what results have been obtained from any experiments in this direction. In general the harder the wood the less creosote will it take up and from the laboratory tests this wood seems to be of a distinctly hard nature.

The

UNDER SECRETARY OF STATE,  
 COLONIAL OFFICE.

given do not apparently allow for their use.

Finally the local Committee has assumed a life of only 20 years for a steel sleeper on the grounds of uncertainty as to railway requirements in the distant future, although many of the present steel sleepers have been 25 years in the road.

The local Committee has thus appraised all the factors with an extreme margin in favour of the local product. This combined with the various emissions noted above vitiates to my mind the results at which it has arrived.

Messrs. Rendel, Palmer and Tritton show that a Msharagi sleeper, even if creosoted and lasting 15 years, must not cost more than  $6\frac{3}{4}$ <sup>s d</sup> in order to be equivalent to a steel sleeper at  $11\frac{1}{2}$ <sup>s d</sup>, whereas the price given by the Resident Engineer is 8/- and it is uncertain whether this includes the cost of creosoting or not.

The saving in initial cost would be  $1\frac{1}{8}$ <sup>s d</sup> per sleeper, assuming bearing plates are used, or a total of approximately £7,000 for the 83,000 mentioned, but, even allowing the two vital assumptions that Msharagi can be creosoted and, if creosoted, that either it or podocarpus will last on an average 15 years. Messrs. Rendel, Palmer and

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The saving in initial cost would be  $1\frac{1}{3}$ <sup>s d</sup> per sleeper, assuming bearing plates are used, or a total of approximately £7,000 for the 85,000 mentioned, but, even allowing the two vital assumptions that Msharagi can be creosoted and, if creosoted, that either it or podocarpus will last on an average 15 years, Messrs. Rendel, Palmer and

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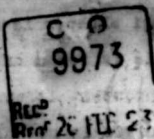
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The saving in initial cost would be  $\frac{1}{8}\frac{s}{d}$  per sleeper, assuming bearing plates are used, or a total of approximately £7,000 for the 83,000 mentioned, but, even allowing the two vital assumptions that Msharagi can be creosoted and, if creosoted, that either it or podocarpus will last on an average 15 years, Messrs. Rendel, Palmer and



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21st February, 1923.



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the use on the East African railways of sleepers made  
from local timber in preference to steel, it is not clear  
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proposed to use the soft wood, *padecarpus*, or the hard  
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The saving in initial cost would be  $1\frac{1}{6}$ <sup>s d</sup> per sleeper, assuming bearing plates are used, or a total of approximately £7,000 for the 83,000 mentioned, but, even allowing the two vital assumptions that Msharagi can be creosoted and, if creosoted, that either it or pedocarpus will last on an average 15 years, Messrs. Rendel, Palmer and

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The saving in initial cost would be  $1\frac{1}{8}$ <sup>s d</sup> per sleeper, assuming bearing plates are used, or a total of approximately £7,000 for the 83,000 mentioned, but, even allowing the two vital assumptions that Msharagi can be creosoted and, if creosoted, that either it or podocarpus will last on an average 15 years. Messrs. Rendel, Palmer and

and Tritton's figures show that the cost of replacement will swamp the initial saving. On the grounds of economy there is therefore no justification for the use of local timber nor will there be until the timber trade of the country can turn out a sleeper at a lower figure, more in keeping with world prices.

From the point of view of stimulating a local product, it becomes a question of whether the Government are prepared to subsidise the industry to the extent of not less than  $1/8 \frac{s}{d}$  a sleeper over a period of years and considerably more if the life is less than calculated.

For these reasons I do not feel justified in recommending that the Government should obtain the bulk of its sleepers from this source although it might be advisable to use 3 or 4 miles, say 6,000-8,000 sleepers, on new lines in order to give them a practical test.

I am,

Sir,

Your obedient servant,



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I am,

Sir,

Your obedient servant,



Downing Street,

1 January, 1923.  
*Hand*

53

Sir,

I have the honour to acknowledge the receipt of your despatch No. 154 of the 9th of November and to transmit to you the accompanying copies of correspondence with the Crown Agents for the Colonies and Lieutenant-Colonel Hammond on the question of using steel or wood sleepers on the Uganda Railway and its branches.

DRAFT.

KENYA

by Sir R. Coryndon.

MINUTE.

Mr. Bottomley. 28/1/23

Mr.

Mr.

Mr. Davis.

Sir G. Grindle.

Sir H. Read.

Sir J. Masterion Smith.

Mr. Ormsby-Gore.

Duke of Devonshire.

2. You will observe that much <sup>has been</sup> difficulty is being experienced in understanding the precise nature of the investigations and <sup>recommendations</sup> the proposals which <sup>of the Local Committee,</sup> have been made locally on this subject, and for convenience I enclose a memorandum embodying a list of questions, to which I should be glad if you will furnish me with replies for my future information.

3. So far as it has been possible for me to form an opinion on the information given, I am not satisfied that any <sup>it has been established that any</sup> ultimate

CA. 2.1.23 (6350)  
CA 12.1.23 (2316)  
CA 19.1.23 (-)  
CA 22.1.23 (0797)  
CA (Hammond) 16.1.23 (-)  
CA (Hammond) 18.1.23 (9973)  
Hand. (Coryndon)

ultimate economy would be assured by the use of local timber sleepers, and while I appreciate the desirability of providing local employment, that consideration and the relatively small economy in the expenditure should not in my opinion be allowed to outweigh the importance of avoiding the risk of having to replace the sleepers in a few years.

4. My attention has been drawn to a statement in "African Industries" of the 10th of February, from which it appears that further orders of 100,000 timber sleepers have been placed locally for the Gishu Uasin Railway and the main line. I should be glad to be informed whether this is correct and what total number of timber sleepers have been ordered since the date of your despatch, together with their cost at the Saw Mill, and the further cost of creosoting, *and the further cost of transportation*.

5. Before any further orders are placed I should wish to have full information on the points raised in the correspondence *and newspaper* which I

enclose.

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enclose.



~~enclose, and also in the memorandum on particular points which accompanied this despatch.~~

6. You will observe that in the last paragraph of his letter, Colonel Hammond suggests that, as an experiment, <sup>a few thousand</sup> 2,000 timber sleepers should be obtained for use on new lines. As the result of such experiment could hardly be judged for many years, Colonel Hammond's suggestion would involve <sup>obtaining</sup> the hope of securing an initial economy in the cost of construction <sup>of the new lines</sup>.

(Apart from that fact, I should have been inclined to adopt his suggestion but if it is true that a very large purchase of timber sleepers has already been arranged, the <sup>proposal</sup> matter is no longer one of material moment.

I have, etc.

(Signed) DEVONSHIRE

*act*

USE OF TIMBER SLEEPERS IN KENYA

*For  
C.S. 28/2/23*

1. In the Committee's statement of the factors for estimating equivalent values, it is stated that the interest factor, with loan money at 6%, may be assumed at 10%.

This is not understood.

2. In the Committee's statement of relative values, figures (under three headings) are given, which in some cases <sup>extend</sup> ~~expand~~ to several lines.

The meaning of <sup>the figures in the</sup> these different lines is not understood.

3. It is not stated whether podocarpus or maharagi timber is intended to be used. If maharagi, it is not stated whether the timber is to be creosoted or merely seasoned.

4. Is it intended to use bearing plates, and, if so, has their cost been allowed for in the various estimates ?

5. What is expected to be the cost of binding the ends of the sleepers to prevent splitting ? Has this cost been allowed for in the estimates ?

6. Do the estimates include the cost of creosoting, if that is proposed ? What arrangements have been made for obtaining a firm contract for ~~the cost of~~ creosoting and at what price ?

7. What has been the result of the enquiries which were to be made as to whether sufficient timber was available locally for providing sleepers ?

8. Assuming that there is sufficient suitable timber for providing the sleepers initially required, will there be enough to provide for periodical renewals ?

(If not, the initial economy in the use of timber sleepers

sleepers must be reduced by the difference in  
 present value between a series of renewals of steel  
 sleepers at intervals of, say, 15 years hence and in  
 the other case 20 years hence. The effect, at  
 6% interest would appear to reduce the saving of  
 178d per sleeper on the initial <sup>cost</sup> supply to a figure  
 in the neighbourhood of 8d. per sleeper.)

10 years lifespan }  
 1000 cost