

(1) Number of pages 6.  
(2) Date of repair 8-9-38.  
(3) Initials of the Referencer J

# MADRAS RECORD OFFICE.

Government of Madras.

*Revenue* DEPARTMENT.

|          |       |                |
|----------|-------|----------------|
| G.O. No. | 4223  | Press-<br>Mis. |
| Dated    | 10-7- | 1890.          |

Not to be folded or roughly handled

No. 16 Directors office!  
Ootacamund 25 June 1890.

From M. A. Lawson Esq.  
Govt Botanist and Director of  
Govt Cinchona Plantations  
to  
Algiris

The Secretary to Government  
Revenue Department,  
Ootacamund

Sir,

In continuation of my letter  
in G.O. 4015  
30-6-90 No. 15 dated the 21<sup>st</sup> June 1890, I now furnish  
the information, which I promised, regarding  
the results obtained in the manufacture of  
6000 pounds of mixed Crown bark.

2 According to the analyses made  
by the Government Quinologist, the bark  
operated upon was of the following alkaloidal  
value:—

|              |             |
|--------------|-------------|
| Quinine      | 3.02        |
| Cinchonidine | 1.01        |
| Quinidine    | .14         |
| Cinchonine   | .24         |
| Amorphous    | .30         |
|              | <u>4.71</u> |

Sulphate of Quinine 4.06

3. From the 6000 pounds, theoretical  
the

redeem the time; what I am doing is this.  
I am doubling the irons, making three  
Stills in the place of one, and ordering an  
additional engine, and with these I  
expect to be able to turn out the four  
thousand pounds required, by the end  
of the current year; always supposing  
that there is no further breakdown,  
through any fresh outburst of Influenza,  
and, that the supplies of chemicals I  
have ordered for are received in time  
to prevent the necessity of again having  
to stop manufacturing.

I have the honor to be  
Sir,  
Your Most Obedient Servant  
M. L. Lawson  
Genl. Physician and Director

there ought to have been obtained 243  
pounds of sulphate of quinine, but  
actually, only 212 pounds have been extracted,  
showing a loss of 31 pounds. Of this quantity  
a certain further amount of Sulphate of quinine  
will be recovered from the residual  
alkaloids, in which there is still some  
quinine left. I believe that this will  
amount to from 10 to 15 pounds, and  
taking the former amount, it will reduce  
the loss to 21 pounds, which out of 243  
pounds, shows a loss of only 12.75 per cent;  
and this I believe to be not unsatisfactory;  
especially when it is taken into account  
that the late batch was made by persons  
quite new to the work; at any rate it may be  
predicated that the results in the future  
will not be worse than <sup>those</sup> given above.

4. The amount of Crude Crystals of  
Sulphate of quinine which can be turned out  
weekly at Aduratum is 90 pounds, or about  
80 pounds of the pure Sulphate. This is  
accomplished by three vats and a single engine,  
and

and was what I had calculated would be  
sufficient for turning out the four thousand  
pounds of quinine, which was the estimate for  
the year, and had no untoward circumstances  
occurred, I believe that my calculations  
would have been verified. These calculations  
however have been upset by the epidemic  
of Influenza, which in February last created  
such a scare, that every one of the workmen  
at the Factory left the place, and went to  
their own country, where they now probably  
lie dead, as none have returned. Fresh men  
had therefore to be trained to the work,  
and this, considering the ignorance of the  
native in all matters relating to chemical  
manufactures, goes necessarily slow. It  
was therefore not till the middle of May,  
that I dared begin making the Sulphate  
of quinine, on a large scale.

5. Owing to the circumstances  
above mentioned, I have lost more than  
two months out of the official year and  
have had to consider how I can best  
redeem

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Revenue department  
REVENUE {1890.} CINCHONA.

G.C. mis. 4223 10 July 1890  
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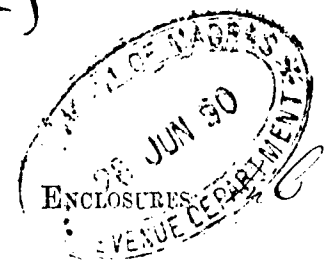
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4223  
10 July 1890  
No 4569

From  
M. A. LAWSON, Esq.,  
GOVERNMENT BOTANIST AND DIRECTOR OF  
GOVERNMENT CINCHONA PLANTATIONS,  
Kagiris.  
To The Secretary to Government  
Revenue Department  
Cotacambur

The Hon. Mr. Grose.  
The Hon. Mr. Garsden, C. Sec.  
No. 16

Dated 25 4 }  
Despd. 25 4 } June 1890.  
Reed. 26 - }



SUBJECT.

Sulphate of quinine  
Purchases further  
details regarding the manu-  
facture of — as provided  
in this office letter No 15  
dated the 21<sup>st</sup> June 1890

To  
The Govt. Botanist  
and Dir. of G.C. Plantations. }  
recd 2/7

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