

(1) Number of pages

30

(2) Date of repair

19-8-38

(3) Initials of the Referencer

4

## MADRAS RECORD OFFICE.

Government of Madras.

*Revenue* DEPARTMENT.

G.O. No.

366

Press  
Mis

Dated

25-3-1885.

Not to be folded or roughly handled

25TH MARCH 1885, No. 366, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—again G.O., dated 5th March 1885, No. 265, Revenue.

ABSTRACT.—Informing Mr. Money that his proposals for the sale of febrifuge cannot be accepted.

READ—also the following Proceedings of the Board of Revenue, dated 12th March 1885, Mis. No. 2377 :—

Read—again Board's Proceedings, dated 21st February 1885, Mis. No. 1668.

Resolution—dated 12th March 1885, Mis. No. 2377.

In continuation of Board's Proceedings, dated 21st February 1885, No. 1668, the Board would beg to refer the Government to the table of mortality printed at page 15 of the Sanitary Commissioner's report for 1883, from which it will be seen that the deaths from fever in the Presidency in the last 18 years amount to 8,884,482, and show an annual average of 215,805, the result being that the mortality from fever proves to be about three times as great as from any other cause. The Board conceive that these figures serve to illustrate the importance of the inquiry whether measures cannot be taken for placing cheap febrifuges readily within reach of the people on some such plan as that suggested in the Board's Proceedings above quoted.

(A true Extract.)

(Signed) E. GIBSON,  
Secretary.

To the Secretary to Government, Revenue Department.

READ—the following letter from W. R. CORNISH, Esq., F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Secretary to Government, Revenue Department, dated Fort St. George, 17th March 1885, No. 155 :—

With reference to Proceedings of Government as per margin,\* I have the honor to report that the liquid solution of cinchona alkaloids prepared by Mr. Hooper has been experimentally tested in the hospitals marginally named.† Such reports as have been received are now forwarded for the consideration of Government, and others will be forwarded as received. As my time in India is short, I prefer to submit the reports before me, and to state my views on the subject, rather than await the complete series of returns. Copy of my instructions to medical officers is appended.

2. I may state at once that the liquid preparation has fully sustained the character I had formed of it. It cures the ordinary malarious fevers with ease and certainty,

25TH MARCH 1885, No. 366, REVENUE.

and it seems to be free from the objections, which are so often found to attend the use of the Bengal febrifuge or cinchonine, in causing nausea and disordered digestive functions. I may refer especially to the remarks of Surgeon-Major Ratton and the temperature charts of the case treated by him. He used the medicine in rather large doses, equivalent to 12 grains of mixed alkaloid, and yet he found no disagreeable effects from the large doses.

3. The testimony of Civil Apothecary Gascoyne (South Canara) is also very favorable. The same remark applies to the report of the Civil Surgeons, Cuddapah and Rajahmundry. The Kurnool reports have not been received.

4. None of the medical officers allude to any deterioration of the preparation by keeping, so I conclude that it stood the test of keeping in hot places.

5. I am satisfied that the preparation is one of very considerable value, and, with the sanction of Government, I should desire to see it used in considerable quantity in Government hospitals.

6. The preparation at present contains 24 grains of alkaloid in a fluid ounce. It would be more convenient, especially for supply to distant hospitals, if the concentration could be carried still further, so that each fluid ounce should contain 40 grains of alkaloid, or each fluid dram 5 grains. This would reduce the bulk by nearly one half, and make the preparation less costly to supply to distant places, and at the same time the standard of 5 grains in a fluid dram would be convenient for dispensary and hospital administration.

7. In regard to manufacture, it is a question whether it might not more conveniently and economically be prepared in the Medical Stores than on the Hills, as apparatus for evaporation and manufacture have recently been set up in the stores. On this point it is desirable that Mr. Hooper should visit the Medical Store Depot and confer with the Storekeeper.

8. I would suggest that a copy of these papers may be sent to the Military Department with the view of the Surgeon-General, Her Majesty's Forces, bringing the preparation to the notice of medical officers in the Military Department, many of whom would probably wish to be able to prescribe a liquid preparation of cinchona bark in which all the alkaloids of the bark are contained in definite strength.

9. I think it is probable that this preparation will come into considerable demand by the medical officers of Government, Municipal and Local Fund Hospitals, and that arrangements should be made for its manufacture. A pound or 20 fluid ounces prepared at the degree of concentration suggested will contain 800 grains, or nearly 2 ounces of alkaloid. We have nearly three hundred civil hospitals and dispensaries, and their present consumption would probably average more than two pounds each a year if it could be supplied. Perhaps I should be not wrong in estimating that from 1,000 to 1,500 lb. of the liquid cinchona would be required by the Store Depot to meet requisitions likely to arise.

10. I have addressed the Director of Government Gardens separately on the subject of increasing the supply of febrifuge for the general population, and my letter will reach Government in due course in the Revenue Department.

READ—Endorsement from the Surgeon-General with Government of Madras, dated Fort St. George, 18th March 1885, No. 158.

ABSTRACT.—Forwarding report of the Civil Surgeon, Kurnool, on the results of the experiments with Cinchona Liquida.

ORDER—dated 25th March 1885, No. 366, Revenue.

Miscellaneous.

may be furnished as soon as possible with estimates showing the cost of preparing 1,000

Communicated to the Military Department.

2. The Government desire that they

25TH MARCH 1885, No. 366, REVENUE.

pounds of the fluid extract at 40 grains to the ounce, both at Ootacamund and at the Medical Stores, Madras. In order to prepare these, Mr. Hooper, the Government Quinologist, will visit the Medical Store Depot and consult with the Medical Storekeeper at Madras.

3. The Government observe that the question of supplying a cheap febrifuge for the general population is now under their consideration with reference to certain proposals of the Board of Revenue, and the success which has attended the experiment reported upon by Dr. Cornish is most valuable in that connection.

4. The papers will also be communicated to the Financial Department in view to consideration of the Board's general suggestion for the establishment, under Local Fund Boards, of an agency for distributing medicines among the people.

5. It is probable that if quinine were made available in small quantities, the people would buy it; and the Government think that the experiment of offering it for sale in  $\frac{1}{4}$  ounce bottles at taluk offices in selected districts should be made. The Director will report whether Mr. Hooper can undertake the manufacture of a sufficient quantity with the means at his disposal.

(True Extract.)

(Signed) H. E. STOKES,  
Secretary to Government.

To the Military Department.  
„ the Surgeon-General with the Government of Madras,  
with seven enclosures returned.  
„ the Board of Revenue.  
„ the Financial Department.  
„ the Director, Government Cinchona Plantations,  
Parks and Gardens, Nilgiris.  
„ the Accountant-General.

Exd. W. H. French.

80 Copies.

2207c  
Govt. of (1885) Madras.

REVENUE.

Issued

Recd.

Encl.

G.O., 25th March 1885, No. 366.

MARCH.

Cinchona Alkaloids.

Orders passed on the Surgeon-General's report upon the liquid solution of — prepared by Mr. Hooper.



P 9  
GOVERNMENT OF MADRAS. 5

Revenue Department,

Ootacamund,

17<sup>th</sup> April 1885.

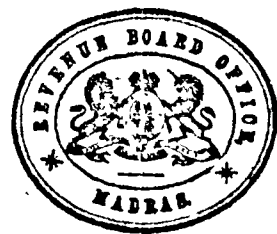
Dear Major Ludwig

In reference to your  
note of this date I try  
to submit for His Excellency's  
personal file of  
papers relating to Cinchona  
alkaloids with Honble.  
members' notes.

Yr. Servant

W. H. H. H.

ours to be about  
as from any other  
source that these  
substantiate the in-  
quiry whether used.  
Now for placing  
readily within reach  
we such plan  
as



Proceedings of the Board of Revenue.

Dated 12<sup>th</sup> March 1835.

No. 2377. Miscellaneous.

READ again Board's Proceedings dated 21<sup>st</sup> Feb.  
1835 No. 1668 Miscellaneous.

Resolution.

In continuation of Board's Pro-  
ceedings dated 21<sup>st</sup> February 1835 No. 1668  
the Board would beg to refer the Govern-  
ment to the table of mortality printed  
at page 15 of the Sanitary Commissioner's  
Report for 1833, from which it will  
be seen that the deaths from fever in the  
Presidency in the last 18 years amount  
to 388,482 and show an annual average  
of 21,580 the result being that the mor-  
tality from fever proves to be about  
three times as great as from any other  
cause. The Board conceive that these  
figures serve to illustrate the im-  
portance of the enquiry whether mea-  
sures cannot be taken for placing  
cheap febrifuges readily within reach  
of the people on some such plan



Memorandum

1885.

Board of Revenue,

MADRAS.

10/11/85

To

The Secretary to  
Government & A.D.

Proceedings, dated 12<sup>th</sup> March 1885.  
No. 2377. Miscellaneous.

Subject.

Enquiries into the means  
of obtaining for planting  
cheap foreign seedlings  
which of the best in some  
such places that suggested  
in the Board's Proceedings of  
21<sup>st</sup> February 1884. 166/1884.

No. 6807

Memo

13

Bottles of cinchona liquida received from the Director Government Botanical Gardens Heidelberg are forwarded to the Principal Medical Storekeeper, with a request that he will be so good as to retain a small quantity in store (say 31) for future reference, and distribute the rest in equal parts to the Medical Officers of Maddur, Rajahmundry, Mangalore, Salem and Tiruvel for careful experimental trial in their jails and report at the end of each month.

2- A similar preparation has lately been introduced to the profession in Europe by Dr. DeVrij and as it contains all the medicinal constituents of bark in the definite proportion of 24 grains of alkaloid to the fluid ounce, prescribers are enabled to give definite doses either as an antiperiodic or tonic.

3- The advantages of such a preparation in a country where cinchona bark is produced are sufficiently obvious, and the Surgeon General looks to the Medical Officers named for a full and careful consideration of the therapeutic value of the preparation- Copies of Government Proceedings on the subject are forwarded for information.

Office of Surgeon General  
with the Govt of Madras.  
Fort St. George 11 December 1884

(By Order).  
Sd/- A. J. Sturges Surgeon  
Secy. Surgeon General  
with the Govt of Madras.

(True copy)

(True copy)

Wm. Forrester  
Surgeon General  
with the Govt of Macras.

(79)

1  
Rev 198/150

3717

Desp

FROM CIRCULATION  
WITH  
REMARKS.

from ad into Dept

3-17

OFFICE OF SURGEON-GENERAL  
WITH THE GOVERNMENT OF MADRAS,  
Fort St. George, 17<sup>th</sup> March 1885.

No. 155

From: W. R. Cornish Esq. D.R.C.S.; C.I.C.

THE SURGEON-GENERAL WITH THE  
GOVERNMENT OF MADRAS,

FORT ST. GEORGE,

TO THE CHIEF SECRETARY TO GOVERNMENT,  
Revenue DEPARTMENT,

SIR,

N<sup>o</sup> 62 dated 16<sup>th</sup> Jan<sup>y</sup> 85  
R.D.

Sail Hospital, Madras  
Police — do — do —  
Sail — do — do —  
Civil Dispensary, Comalagon  
Police Hospital, Mangalore  
Central Jail, Hooper's Station.

With reference to Proceedings of Govern-  
ment as per margin, I have the honor to report  
that the liquid solution of cinchon-  
alkaloids prepared by Mr. Hooper has been  
experimentally tested in the Hospitals  
marginally named. Such reports as have been  
received are now forwarded for the consider-  
ation of Government, and others will be for-  
warded as received. As my time in India is  
short, I prefer to submit the reports before me,  
and to state my views on the subject, rather  
than await the complete series of returns.  
Copy of my instructions to medical officers  
is appended.

2. I may state at once that the liquid  
preparation has fully sustained the character  
I had formed of it. It cures the ordinary  
malarious fevers with ease and certainty, and  
it seems to be free from the objections, which are  
so often found to attend the use of the Bengal  
febrifuge, or cinchonine, in causing nausea  
and disordered digestive functions. I may  
refer especially to the remarks of Surgeon Major  
Ratton

Patton, and the temperature charts of the case treated by him. He used the medicine in rather large doses, equivalent to 12 grains of mixed alkaloid, and yet he found no disagreeable effects from the large doses.

3. The testimony of civil apothecary Gascoyne (South Canara) is also very favorable. The same remark applies to the report of the Civil Surgeons Luddapah and Rajahmundry. The Kurnool reports have not been received.

4. None of the medical officers allude to any deterioration of the preparation by keeping, so that I conclude that it stood the test of keeping in hot places.

5. I am satisfied that the preparation is one of very considerable value, and with the sanction of Government I should desire to see it used in considerable quantity in Government Hospitals.

6. The preparation at present contains 24 grains of alkaloid in a fluid ounce. It would be more convenient especially for supply to distant hospitals if the concentration could be carried still further, so that each fluid ounce should contain forty grains of alkaloid, or each fluid dram five grains. This would reduce the bulk by nearly one half, and make the preparation less costly to supply to distant places, and at the same time the standard of five grains in a fluid dram would be convenient for dispensary and Hospital administration.

7. In regard to manufacture, it is a question whether it might not more conveniently and economically be prepared in the medical stores, than on the Hills. On this point, it is rather for evaporation and manufacture have been set up in the stores. On this point, it is that Mr. Hooper should visit the medical stores and confer with the storekeeper.

8. I would suggest that a copy of these papers may be sent to the Military Department with the view of the surgeon General R. H. Jones bringing the preparation to the notice of medical officers in the military Department, many of whom would probably wish to be able to prescribe a liquid preparation of cinchona bark in which all the alkaloids of the bark are contained in definite strength.

9. I think it is probable that this preparation will come into considerable demand by the medical officers of Government, municipal, and Local Fund Hospitals, and that arrangements should be made for its manufacture. A pound or 20 fluid ounces prepared at the degree of concentration suggested will contain 800 grains, or nearly 2 ounces of alkaloid. We have nearly three hundred civil hospitals and dispensaries, and their present consumption would probably average more than two pounds each a year if it could be supplied. Perhaps I should be not wrong in estimating that from 1000 to 1500 lbs. of the liquid cinchona would be required by the Store Depot to meet requisitions likely to arise.

10. I have addressed the Director of Government Gardens separately on the subject of increasing the supply of febrifuge for the general population, and my letter will reach Government in due course in the Revenue Department.

I have the honor to be

Yours most respectfully  
W. M. Hooper  
Surgeon Major  
with the force  
Patton

Revenue 1885) DEPARTMENT.

From

No: 198

THE SURGEON-GENERAL WITH THE  
GOVERNMENT OF MADRAS,  
Fort St. George.

No.

Dated

17th

March

1886.

Recd. 18th

No. 168.

Sr: G.

SUBJECT.

Subj: reports on  
the results of the test  
made of the Cinchona  
alkaloid prepared by  
Mr. Cooper.

20-2-85  
23-2-85

N<sup>o</sup> 158

Forwarded to the  
Secretary to Government  
Revenue Department, in  
continuation of the Office  
letter N<sup>o</sup> 155 dated the 17<sup>th</sup> inst

Wm Cornish  
Surgeon General with Govt  
Fort St George 18<sup>th</sup> March 1883



REVENUE (1885) DEPARTMENT:

No.

2137

From

The Surgeon General  
to the Govt of India

Dated

18<sup>th</sup>

Recd.

20<sup>th</sup>

March 1885

No. 158

P.A.

Page 2

SUBJECT.

Forwarding report  
of the Civil Surgeon, Kumbh  
on the results of the experi-  
ment with Cinchona Liquid.

Revenue Dept.

B. Rev. 12 March 85.  
No 2777.

For orders

The B. ask that some measures  
may be taken to supply in the  
villages, a cheap Fibrifuge.

There would be no objection  
to Vaccinators and if necessary,  
to School masters keeping  
stocks of cheap medicines, a  
laying in by government monthly  
their receipts on account of  
medicines sold. The difficulty  
really lies in the cheap Fibrifuge,  
all the cheap preparations now in  
use are unpopular from various  
causes, the chief being the very  
unpleasant after effects caused  
and the fact that they are not  
cheap enough - It would probably  
be found that missionaries who  
have more opportunities than others  
in distributing such medicines  
have made but little way so  
far - The fluid extract

9025-3-85. ✓ 366.

Letter prepared by Mr Hooper at  
Bolacammund seems really to  
offer good hopes of success &  
his submitted the question  
may be left until his report  
comes in on the cost of the Extract.  
There will be no difficulty in  
finding an agency for sale  
of any popular medicine, the  
difficulty is to make a medicine  
Cheap and effective.

WLS Mh  
14/iii

This should be read, & G.O. 5  
March 1885 - 265. and again  
with Dr Cornish's report and  
communicated to the Trans-  
cendental movement in view  
to consideration of the Board  
General suggestion for the es-  
tablishment of a medicine  
distributing agency under  
Local Fund Board.

WLS

20-3-88.  
23-3-88

distribution of  
Cheap medicines

Revenue Sept. 7 92

From Surgeon Genl

17 March 85.

### Orders

He initially the Draft  
G.O. Was talking to Mr. M.C.  
Rohde last night on  
the subject of distributing  
cheap febrifuges - He  
told me that he was  
certain that if  $\frac{1}{4}$  of  
bottles of Quinine  
of 2 minims were kept  
for sale @ 1/- each at  
L.F. Hospitals & other con-  
-venient localities in  
malarious tracts that  
they would find a ready  
sale - The people he says  
are very conservative in  
their ideas and they have  
such a firm belief in the  
efficacy of Quinine that  
notwithstanding the  
comparatively low price  
of febrifuge mixtures

Dr Cornish reports upon the  
liquid solution of alkaloids of  
Cinchona, prepared by Mr Hooper  
at Bolacammund [G.O. 2<sup>nd</sup> Dec 84  
No 1329 Rev.] - All the reports of  
the medical officers who have  
experimented with the medicine  
are very favorable.

The solution was made up  
at 24 grains to the liquid ounce  
Dr Cornish considers that if  
possible it should be made  
at 40 grains to the ounce, in  
which case a fluid dram  
would be the ordinary dose  
containing 5 grains of alkaloid  
Dr Cornish considers the  
demand for the solution would  
be about 1500 lbs per annum  
for the Govt Hospitals and  
dispensaries -

Dr Cornish makes 3 suggestions  
(a) that his report and the papers  
should be communicated to  
the military Dept.

(b) that Mr Hooper should  
visit the medical stores  
Madras where Dr Cornish  
considers the fluid can  
be better prepared than at  
Botacammund -

(c) that arrangements should be  
made for the manufacture  
of the fluid upon a large scale.

This submitted that the  
first thing to be done is to  
find out exactly what the  
medicine costs and whether  
it would be cheaper to  
make it in Madras than  
Botacammund.

Mr Lawson in his letter  
to G.O. 2<sup>nd</sup> Dec 84. [1329] points  
out that evaporation plays

it would be wrong to suppose  
they would obtain a preparation.  
He said that many people  
were not afraid of the price  
of Quinine and that  
the reason why it was not  
more extensively used  
was that it was not locally  
procureable. There would  
be no harm in trying  
the experiment in some  
selected districts - viz. Godavari  
Kistna & Nizam in the North  
in the Nizam - Anantapur  
Kurnool & other places  
where fever is more or less  
prevalent if being duly  
notified in the District  
Gazettes & the records that  
Quinine at Rs. 1 per bottle  
was for sale at certain  
places - All that is necessary  
is for Mr Hooper to manufacture  
the sulphate of Quinine and  
purchase a few hundreds of  
1/4 oz bottles. H.V.

22/3

a large factory to make it  
then could probably be better  
effected at Madras than at  
Botacammund -

The cost price of the  
substances used in the  
manufacture seem to be  
about - 1 one shilling per  
pound of the mixture -  
but this is only the rough  
calculation, this submitted  
the cost should now be properly  
worked out say for the manufacture  
of 1000 lbs. at 40 grains  
to the ounce, the preparation  
Dr Cornish proposes.

In any case the fluid  
seems to be likely to prove a  
far cheaper preparation than  
the febrifuges of Dargachling  
prepared at one rupee the  
ounce.

3667/25.3.85.

|                             |       |
|-----------------------------|-------|
| Prices of preparations from |       |
| Cinchona -                  | Rs. 1 |
| Cinchona Febrifuge -        | 1 1/2 |
| 1 Dargachling               | 1/2   |
| Cinchonide Sulphate         | 1 1/2 |
| Cinchonide ioc.             | 5 1/2 |
| Sulphate of Quinine         | 5 1/2 |

V

Received from G.O. 5/12/85 Suggested order  
10265. 1987  
C.D. 1952

The letter of the Surgeon General  
was communicated to the  
Military Dept -

2. The government desire that they may be furnished as soon as possible with estimates showing the cost of preparing the fluid at 40 grains to the liquid ounce extract both at Botocum and

and at the medical stores Madras; In order to prepare them Mr. Hooper, the Government Quinologist will visit the Medical Store Dept and consult with the Medical Storekeeper at Madras.

3. The government observe that the question of supplying a cheap febrifuge for the general population, is now under their consideration, in connection with certain proposals of the Bd of Revenue, and the success which has attended the experiments reported upon by Dr. Cornish is most valuable in that connection.

4. The following will be

Conclusion

It is proposed to supply the fluid at 40 grains to the liquid ounce extract both at Botocum and at the medical stores Madras. In order to prepare them Mr. Hooper, the Government Quinologist will visit the Medical Store Dept and consult with the Medical Storekeeper at Madras.

Communications to the General Bd. in relation to the distribution of the fluid for the general population for the establishment of numerous local Free Dispensaries, and opening for distribution of medicines among the people.

1882-83 Military Dept. 16th Sep 91 and 17th Sep 91. 1882-83 Military Dept. 16th Sep 91 and 17th Sep 91.

19/III