

(1) Number of pages 42
(2) Date of repair 22-8-58
(3) Initials of the Referencer Y

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	718	Press Mis.
Dated	17-8-1886.	

Not to be folded or roughly handled

17TH AUGUST 1886, No. 718, REVENUE.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from M. A. LAWSON, Esq., Government Botanist and Director of Cinchona Plantations, Nilgiris, to the Secretary to Government, Revenue Department, dated Ootacamund, 24th June 1886, No. .

The 500 lb. of febrifuge, which was ordered by Government to be made by Mr. Hooper in Ootacamund, is now completed, and appears to be of excellent quality; I have, therefore, now the honor to request you to inform me how it is to be disposed of.

2. I would suggest, in order that its good qualities may be fully made known to the public at large, that it should be sent through the Medical Stores Department to the various dispensaries in the Presidency for trial; and that at first the febrifuge should be distributed gratis.

3. As there is an increasing number of applications made for it locally, I would ask to be allowed to meet this demand by selling small quantities of it at the rate of Rs. 1-8-0 per lb.

No. 3873.

Forwarded to the Surgeon-General with the Government, for favor of early remarks.

OOTACAMUND,
1st July 1886.

(Signed) J. F. PRICE,
Ag. Secretary to Government.

To the Surgeon-General, through the Public Department.

No. 1105-C.

Forwarded.

OOTACAMUND,
8th July 1886.

(Signed) E. S. LAFFAN,
Ag. Under-Secy. to Govt.

READ—the following letter from G. BIDIE, Esq., M.B., C.I.E. Acting Surgeon-General, with the Government of Madras (through the Public Department, with reference to No. 1105-C, of 8th July 1886), to the Secretary to Government, Revenue Department, dated Ootacamund, 16th July 1886, No. O-276 :—

In returning the letter marginally noted from the Director of Cinchona Plantations No. June 1886; referred under G.O., to your address, I have the honor to submit the following remarks to the Right Honorable the Governor in Council regarding the fluid cinchona febrifuge prepared by Mr. Hooper, of which 500 lb. are reported to be ready.

2. The preparation now contains the convenient proportion of 40 grains to the fluid ounce, so that an average tea-spoonful will have in it five grains of the alkaloids. It is reported to be stable, and I have seen a specimen that had been kept in a bottle for one year without showing any sign of deterioration. The price also is low, Rs. 0-12-0 per pound.

3. As regards its febrifuge properties they have been favorably reported on, and it does not seem to cause any disagreeable effects even in pretty large doses.

4. So far therefore it appears to have all the requisite properties of a popular febrifuge for India, inasmuch as it is efficient, safe, stable and cheap.

5. It is very desirable therefore that its use should at once be extended and active and continuous efforts made to make its value known, especially to the poorer classes of the native population. They are already familiar with the value of quinine as a remedy for malarial fevers, but it will take time and trouble to secure an equal amount of confidence in an absolutely new preparation. I agree with the view of the Director of Cinchona Plantations "that at first the febrifuge should be distributed gratis," as its valuable properties are in this way more likely to be brought home to the classes who chiefly suffer from fever, than by selling it at even a nominal price. To reach them I would suggest that the present supply of 500 lb. be issued through the Principal Medical Storekeeper to certain charitable dispensaries to be selected by me, both for experimental trial in hospital and for issue free of charge to out-door sick, in quantities not exceeding one ounce. This gratuitous issue might be continued for one year, subject to report at the end of that period.

6. The above measure will popularise it to a certain extent, but to render the preparation more generally known and acceptable, I have further to suggest that its efficacy and cheapness be directly brought by Government to the notice of Local Boards and Municipalities, with the view of their substituting it in their hospitals for a certain proportion—say to the extent of one-fourth of the annual supply—of the more expensive cinchona alkaloids which they now draw from the medical stores.

7. To carry out these measures it will obviously be necessary that a steady supply of the preparation be sent into the Medical Stores depôt, and I note that Surgeon-General Cornish estimated* that from 1,000 to 1,500 lb. would probably be annually consumed in dispensaries alone.

This amount I would expect in due course to see exceeded to a large extent. Dr. Cornish further suggested that the drug should be brought to the notice of the Surgeon-General, Her Majesty's Forces; an opinion in which I concur, as many Medical officers serving under his orders might wish to try a preparation containing the mixed alkaloids as they exist in the bark, both as a febrifuge and for other purposes.

8. These various arrangements I would regard as pioneer efforts, and would ultimately contemplate the sale of the liquid cinchona at prime cost, including bottles &c., through the Revenue officials, so that it might be readily obtainable in the most remote corners of the Presidency. Having reached this point it may be anticipated that its sale would in due course be taken up by petty dealers in the bazaars, the Revenue Department still undertaking the duty of disposing of it to them in quantity, but at a slight discount on all sales of 5 lb. and upwards. All the supplies issued outside the Medical Department should be put up in bottles closed with a standard seal, and bearing a distinctive label to prevent malpractices. The label should also give directions as to the doses and uses of the medicine. As an example of a drug being popularised in the course of a few years by means similar to those here suggested, I may mention "chlorodyne," which is now generally known and in use all over the country; and I feel confidence in the possibility of making the liquid cinchona equally popular in the course of a few years, as it will meet a public want.

9. In the five years ending with 1885, the average annual mortality from fevers was, according to the Sanitary Commissioner's returns, 206,130, or about one-third of the total deaths from all causes; and it must be remembered that this number does not include the deaths from secondary complaints induced by fevers. The ravages of cholera and small-pox, which are so much dreaded, are separately insignificant as compared with the fatality of this cause; and whereas these diseases give us some respite, fever, although subject to fluctuations, never ceases its work of destruction. As sanitary agencies and sanitary improvements increase no doubt paroxysmal fevers will become less frequent and fatal, but we must wait for these results; and meanwhile such diseases may be rendered much less destructive of health and much less deadly, by placing within reach of the people a cheap and efficient febrifuge. But to

effect this we must have systematic and continuous effort on the part of the Medical Department and Revenue officials, and a steady supply of the medicine of uniform strength and good quality.

READ—the following letter from G. BIDIE, Esq., M.B., C.I.E., Acting Surgeon-General with the Government of Madras, to the Secretary to Government, Revenue Department, dated Ootacamund, 12th August 1886, No. O-374:—

In continuation of my letter No. O-280, dated the 16th ultimo, I have the honor to forward copy of a letter* from the

* No. O-77 of 9th August 1886, received with Surgeon-General, Her Majesty's Forces; Military Secretary's endorsement, No. 4784, of 10th idem. and with reference to his request have to ask, that with the sanction of His Excellency the Governor in Council, Mr. Lawson

may be instructed to forward the 500 lb. of fluid cinchona now ready, as early as possible, to the Principal Medical Storekeeper, to enable me to meet this demand for 200 lb. for trial in Upper Burma. Dr. Irvine will be requested to be good enough to ask his officers to report the results of their trials of the drug.

ENCLOSURE.

Letter from J. IRVINE, Esq., M.D., Surgeon-General, Her Majesty's Forces, to the Secretary to Government, Military Department, dated Ootacamund, 9th August 1886, No. O-77.

With reference to the large amount of inefficiency caused by fever in the Burma Field Force and amongst the followers attached to it, I have the honor to request that the Government may be pleased to sanction a certain quantity of the new fluid preparation of cinchona (say 200 lb.) being placed at my disposal for trial in Upper Burma.

No. 4784.

Approved and referred to the Surgeon-General with the Government, for further necessary action and report.

(By Order.)

OOTACAMUND,
10th August 1886.

(Signed) A. KENNEY-HERBERT, Lt.-Col.,
Secretary to Government.

No. 1214-C.

Transferred to the Revenue Department.

(By Order.)

OOTACAMUND,
27th July 1886.

(Signed) E. S. LAFFAN,
Under Secy. to Govt.

ORDER—dated 17th August 1886, No. 718, Revenue.

Miscellaneous.

The proposals of the Surgeon-General for the distribution of the febrifuge recently manufactured by Mr. Hooper are approved. Sanction is also accorded to the request of the Director of Government Cinchona Plantations that he may be allowed to sell a small quantity locally.

2. The Government await the report called for in G.O., 25th January 1886, No. 55, Revenue. In submitting that report the Surgeon-General with the Government should state what quantity, he would recommend, should be manufactured annually.

* G.O., dated 31st March 1886, No. 254. An indent has already been forwarded* to the Secretary of State for a disintegrator and turbine, and, as soon as these are received, Mr. Hooper will be able to manufacture large quantities of the extract without difficulty.

3. The Principal Medical Storekeeper will be directed to place 200 lb. of the extract at the disposal of the Surgeon-General, Her Majesty's Forces, for trial among the troops in Upper Burma. The Government will be glad to receive, in due time, a report on the results of the trial of the febrifuge.

(True Extract.)

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

To the Government Botanist.
 „ the Surgeon-General with the Government of Madras.
 „ the Public Department, for communication to the Principal Medical Storekeeper.
 „ the Financial Department.
 „ the Accountant-General.
 „ the Military Department, for communication to the Surgeon-General, Her Majesty's Forces.
 „ the Board of Revenue.

Exd. W. H. French.

100 Copies.

3-0-20 718 for
approval.

[Handwritten signature]

[Handwritten mark]

7.12-07

2. c. 20 889/86 28-10-86-87/86
2. c. 20 889/86 28-11-86 28-11-86-87/86

Original

Govt. of (1886) Madras.
REVENUE.

Issued

Recd.

Encl.

G.O., 17th August 1886, No. 718.

AUGUST.

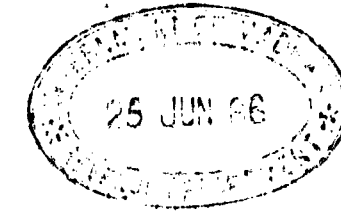
Cinchona Fluid.

Passing orders on proposals for disposal of the
— prepared by Mr. Hooper, the Government
Quinologist.



No

From



Director's Office
Cotacamund, June 1886
P.O. No. 267

M. A. Lawson Esquire
Government Botanist and Director of
Cinchona Plantations
Nilgiris.

To
The Secretary to Government
Revenue Department
Cotacamund.

Sir,

The 500 lbs of Febrifuge, which was ordered
by Government to be made by Mr. Hooper in
Cotacamund, is now completed, and appears
to be of excellent quality; I have, therefore, now
the honor to request you to inform me how it is
to be disposed of.

2. I would suggest, in order that its good
qualities may be fully made known to the
public at large, that it should be sent through
the medical stores Department to the various
dispensaries in the Presidency for trial; and
that at first the febrifuge should be dis-
tributed gratis.

3. As there is an increasing number of
applications made for it locally, I would
ask to be allowed to meet this demand
by selling small quantities of it at the
rate of Rs 1-8-0 per lb.

I have the honor to be
Sir
Your Most Obedient Servant
M. A. Lawson
Govt. Botanist & Director

1886

Through the Public Department
with reference to No. 1105 C. of 8th July '86

OFFICE OF SURGEON-GENERAL

WITH THE GOVERNMENT OF MADRAS,

Cotacamund 17th July 1886

No. 07276

From

G. Bidie Esq. M. B., C. S. E.

By

THE SURGEON-GENERAL, WITH THE

GOVERNMENT OF MADRAS,

FORT ST. GEORGE,

To

Cotacamund.

THE ~~CHIEF~~ SECRETARY TO GOVERNMENT,

Revenue DEPARTMENT.

Cotacamund.

SIR,

No. June 1886;
referred under G.O.
No. 3873 of 1 July 1886.

In returning the letter marginally noted from the Director of Cinchona Plantations to your address, I have the honor to submit the following remarks to the Right Honorable the Governor in Council regarding the fluid Cinchona Febrifuge prepared by Mr. Hooper, of which 500 lbs are reported to be ready.

1. The preparation now contains the convenient proportion of 40 grains to the fluid ounce, so that an average tea-spoonful will have in it 5 grains of the alkaloids. It is reported to be stable, and I have seen a specimen that had been kept in a bottle for one year without showing any sign of deterioration. The price also is low Rs 8-0-0 per pound.
2. As regards its febrifuge properties they have been favorably reported on, and it does not seem to cause any disagreeable effects even in pretty large doses.
3. So far therefore it appears to have all the requisite properties of a popular febrifuge for India

Vide Mr Bidie's
d. o.

India, inasmuch as it is efficient, safe, stable & cheap.
5. It is very desirable therefore that its use should at once be extended and active and continuous efforts made to make its value known, especially to the poorer classes of the native population. They are already familiar with the value of quinine as a remedy for malarial fevers, but it will take time and trouble to secure an equal amount of confidence in an absolutely new preparation. I agree with the view of the Director of Cinchona Plantations "that at first the febrifuge should be distributed gratis," as its valuable properties are in this way more likely to be brought home to the classes who chiefly suffer from fever than by selling it at even a nominal price. To reach them I would suggest that the present supply of 500 lbs be issued through the Principal Medical Storekeepers to certain charitable dispensaries to be selected by me, both for experimental trial in hospital and for issue free of charge to out-door sick, in quantities not exceeding one ounce. This gratuitous issue might be continued for one year, subject to report at the end of that period.

6. The above measure will popularise it to a certain extent, but to render the preparation more generally known and acceptable I have further to suggest that its efficacy and cheapness be

*S.O. Revenue
Department N^o
266 of 25 March '85

8P
to directly brought by Government to the notice of Local Boards and Municipalities, with the view of their substituting it in their hospitals for a certain proportion - say to the extent of one-fourth of the annual supply - of the more expensive Cinchona alkaloids which they now draw from the Medical stores.

7. To carry out these measures it will obviously be necessary that a steady supply of the preparation be sent into the Medical Stores Depot, and I note that Surgeon-General Cornish estimated that from 1000 to 1500 lbs would probably be annually consumed in dispensaries alone. This amount I would expect in due course to be exceeded to a large extent. Dr. Cornish further suggested that the drug should be brought to the notice of the Surgeon-General Her Majesty's Forces, an opinion in which I concur, as many Medical Officers serving under his orders might wish to try a preparation containing the mixed alkaloids as they exist in the bark, both as a febrifuge and for other purposes.

8. These various arrangements I would regard as pioneer efforts, and would ultimately contemplate the sale of the liquid Cinchona at prime cost, including bottles &c., through Revenue Officials, so that it might be readily obtainable in the most remote corners of the Presidency.

Having

Having reached this point it may be anticipated that its sale would in due course be taken up by petty dealers in the bazaars, the Revenue Department still undertaking the duty of disposing of it to them in quantity, but at a slight discount on all sales of 5 lbs and upwards. All the supplies issued outside the Medical Department should be put up in bottles closed with a standard seal, and bearing a distinctive label to prevent malpractices. The label should also give directions as to the doses and uses of the medicine. As an example of a drug being popularised in the course of a few years by means similar to those here suggested I may mention "Chlorodyne", which is now generally known and in use all over the country: and I feel confidence in the possibility of making the liquid cinchona equally popular in the course of a few years, as it will meet a public want.

9. In the 5 years ending with 1885 the average annual mortality from fevers was, according to the Sanitary Commissioner's returns 206,130, or about one third of the total deaths from all causes; and it must be remembered that this number does not include the deaths from secondary complaints induced by fevers.

The ravages of cholera and small-pox, which are so much dreaded, are separately insignificant as

98
as compared with the fatality of this cause; and whereas these diseases give us some respite, fever, although subject to fluctuations, never ceases its work of destruction. As Sanitary agencies and sanitary improvements increase no doubt paroxysmal fevers will become less frequent and fatal but we must wait for these results; and meanwhile such diseases may be rendered much less destructive of health and much less deadly by placing within reach of the people a cheap and efficient antifebrile. But to effect this we must have systematic and continuous effort on the part of the Medical Department and Revenue Officials, and a steady supply of the medicine of uniform strength and good quality.

I have the honor to be,
Sir,
Your Most Obedt. Servant.

Lieut. M.B., L.S.E.
Ag. Surgeon-General.
Government of Madras.

[Signature]

Revenue

(1886) DEPARTMENT.

GURNEY NO. 283

From G. Bidie Esq. M.B., C.S.E.
By THE SURGEON-GENERAL WITH THE

GOVERNMENT OF MADRAS,

East St. George.

Botacannund.

No. 976.

Dated 16th July 1886.

Recd. 17th July 1886.
No. 2673

Enc.

SUBJECT.

Submitting remarks re-
garding the fluid Cinchona
Febrifuge prepared by Mr.
Hooper

N-124C

Transferred to the
Revenue Dept.

(By Order)
Under Secretary

Botacannund
July 1886

D. O. No.

Belmont

Office of Surgeon-General
with the Government of Madras.

23rd July 1886.

My dear Mr. Foster,

In para 2 of
my letter No 0/276 of 16th inst.
the price of the fluid Cinchona
is given as Rs. 1.8.0 per
pound on the authority
of Mr. Lawson's letter.
Submitted to me for
remarks; but he has
just told me that the
information can be
supplied at 12 as per
pound, if you have no

C30-7-86. R217-8-86.
R27-8-86. R18-8-86.
R218-8-86.
R218-8-86.

objection I shall be
 obliged if you will
 kindly substitute

R. O. 12. 0

for
 "R 1. 8. 0"

in my letter.

Yours truly
 Lewis

(1880.)
REVENUE DEPARTMENT.

D.O. No. 108,

From G. Bidie Esq.

Dated 23rd }
Received 23rd } July 1886.
Enclosures ~

No. "

SUBJECT
Requesting to substitute
ante annas 12 as the price
of one pound of the ^{fluid} cinchona
instead of Rs 4-8- as given
in his letter.

OFFICE OF SURGEON-GENERAL

WITH THE GOVERNMENT OF MADRAS,

Ootacamund, 12th Aug: 1886.

No. 07374

From G. Bidie Esq. M. B. C. S. E.

By THE SURGEON-GENERAL WITH THE

GOVERNMENT OF MADRAS,

Fort St. George,

To

THE ~~CHIEF~~ SECRETARY TO GOVERNMENT,

Revenue DEPARTMENT.

SIR,

In continuation of my letter No. 07280 dated
the 16th ultimo, I have the honor to forward copy
No. 0777 of 9 August 1886 of a letter from the Surgeon-General Her Majesty's
received with Mily. Forces; and with reference to his request have to
Secy's endorsement ask, that with the sanction of His Excellency the
No. 4784 of 10th idem Governor in Council, Mr. Lawson may be in-
structed to forward the 500 lbs of fluid cinchona
now ready, as early as possible to the Principal
Medical Storekeeper, to enable me to meet this
demand for 200 lbs for trial in Upper Burma.
D^r Spruce will be requested to be good enough
to ask his Officers to report the results of their
trials of the drug.

Have the honor to be

Sir,

Your Most Obedt. Servant.

G. Bidie M. B. C. S. E.

Ag. Surgeon-General.

Government of Madras.

C. 6000/36

Revenue (1886) DEPARTMENT.

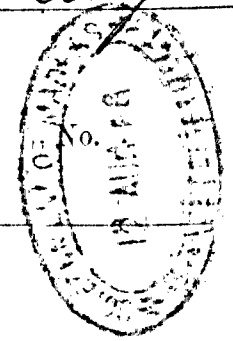
No. 6574.

From G. Bidie Esq. M.B., C.I.E.
AGT THE SURGEON-GENERAL WITH THE

GOVERNMENT OF MADRAS,
Fort St. George.

No. 07874.

Dated 12th August 1886.
Recd. 12th



Enc: 1

SUBJECT.

Requesting that Mr. Lawson be instructed to forward the 500 lbs of Cinchona fluid now ready.

See Dep. G. 07874

30-7-86
27-8-86
28-8-86

Surgeon-General's Office.
Her Majesty's Forces.

No. 4777. Botacammund 9 August 1886.
From.

J. Irvine Esq. M.D.
Surgeon-General His Forces.

38

To.
The Secy. to Government.
Military Department.
Botacammund.

Sir,

With reference to the large amount of inefficiency caused by fever in the Burmah Field Force and amongst the followers attached to it, I have the honor to request that the Government may be pleased to sanction a certain quantity of the new fluid preparation of Cinchona (say 200 lbs) being placed at my disposal for trial in Upper Burmah.

Yours faithfully

J. Irvine. M.D.
Surgeon-General His Forces.

No. 4784.

Approved and referred to the Surgeon-General with the Govt. for further necessary action & report.

(By order)

S. J. A. Henney Herbert, Lt. Col.

Secy. to Govt.

(True Copy)

Given M.B., C.I.E.

Ag. Surgeon-General Govt. of Madras.

Botacammund }
10th August '86 }

Botacammund }
12th August 1886 }

[Signature]

C. No. 5062

C. No. 6033.

From Ag. Surgeon Genl G. Redie,
(thru' the Public Dept.)

Dated 16th July 1886.

FOR ORDERS.

Mr Lawson reports that 500^{lbs} of Mr Hooper's Febrifuge are now ready for distribution and he proposes

- (1) gratuitous distribution thru' the Medical Storekeeper to the various dispensaries in the Presidency.
- (2) the sale by Mr Lawson of a small qty. locally, as there are increasing applications for it.

This letter was sent for remarks to the Surgeon General who proposes

- (1) the distribution gratis to certain charitable dispensaries to be selected by him, and the sale to L.F. & Municipal dispensaries who now buy the more expensive cinchona alkaloids.
- (2) to bring the preparation to the notice of the Surgeon Genl with H. M. Forces.
- (3) ultimately to sell the extract

Remb 1/14

thru' the Revenue officials
throughout the Presidency.

Distribution of Linchman's pills
for the purpose of
FOR ORDERS.

submitted that Dr Bidie's pro-
posals and Mr Lawson's 2nd pro-
posal be accepted. There is no
need to give it to L.F. & Munici-
pal Dispensaries as more expensive
drugs for which this cd. be
substituted are already used
therein. As the indents for drugs
are submitted or at least super-
vised by the Dt. Medical &
Sanitary Officer there will be
no difficulty in introducing the
extract in such dispensaries.
Dr Bidie shd. be called upon
to submit a definite state-
ment of his requirements so
that the manufacture may
at once be proceeded with.

HAS
28.7.86

W.L.

Approved
J.V. 2/8

I agree & consider that it
would be hardly possible to
confer a greater benefit upon
the population than will be
conferred if we succeed in
bringing this Febrifuge into
familiar use throughout
this Presidency

M.D. Aug 8/86

C.S.S. 7-86.
29-8-86.
20-8-86.
21-8-86.
22-8-86.

G.O. 25 January 86
No 55

Rev C. No 6033

With due deference
to Dr Bidie & all con-
cerned we seem to be
going in a circle &
making no progress.

The suggestion is
now made canhard.
ly be called an ad-
vance on what was
settled six months
ago when it was de-
termined to distri-
bute the febrifuge
to Government Hospi-
tals & dispensaries
at a portion of
cost price.
We don't know
what effect has been
given to this order.
It is about time
we should. The
present proposal
is a slight variation
of the above. Selected
Government dispen-
saries are to have a
gratis supply. Local
town & municipal
dispensaries are to

purchase, and ultimately (with the word) the Surgeon General would contemplate the sale of the tract at prime cost, through the Revenue Dept. - the very action which was sanctioned 14 months ago is now only contemplated in the distant future. As to local dispensaries I fail to see any reason for treating them differently from Government institutions of the same type. We want the people to be reached let the agency be what it may.

This was not ordered in Jan^y last. H.S.

Let us go ahead on the principles already approved supplying as many hospitals of all sorts

vide Rev G.O. 28 March 1885 No 366. para 4 + Financial G.O. 28 April 1885 No 82 L.T.

No application

Oct 1885

G.O. 25 Jan 86 No 220 at once to be proceeded

as is convenient and for the present, giving and selling as arranged - the present supply may have to be priced differently as it may, for all I know, be of different strength than mentioned in the January order but let us have information what is doing - has been done as to sales. There is a talk of an agency for distributing medicines among the people. What has become of it?

It seems to me that more energy should be shown in manufacturing the extract if its use is to be pushed. Last year when 1000 lbs were ordered only 585 lbs were produced. Further manufacture

With. It is not stated
whether the present
500 lbs is in further
execution of that order
but it appears to have
been made in Osta.
cannied through a
special apparatus
has been erected in
the house at the Medi-
cal Stores for the pur-
pose so that the re-
quired quantity of
"the liquid cinchona"
could be "speedily man-
ufactured." There is
plenty of the raw ma-
terial available.

CCL
3/8/86

100
G.O. 6 July 1885
No 797 Rev

Looking to the great
increase of fever among
the troops in Burmah
it seems very desirable to
increase the manufacture
of the febrifuge
58-86- Mampun

Public
CURRENT NO. 2673
(1886.)
REVENUE DEPARTMENT.

No. 5062

Enclosurement No. 3873.

Forwarded to the Surgeon
General with the Government
for favour of early remarks.

Noted and
10th July 1886 } *Rednickhies*
Specifato Gost.

From The Govt. Botanist / Sir
off cinchona Plantations
Bilgavis.

Dated 24th }
Received 25th } June 1886

Enclosures

M. 6. 7. 88
No.

SUBJECT.

Reports to the completion
of the manufacture of the Liquid
Extract of cinchona by Mr. S. Hooper
Ag. Under Secy and asks for orders for its disposal

Enclosurement

With reference to the Hon.
Mr Master's minute on the
letter of Mr Lawson and Dr
Bidie regarding the fluid
Extract of cinchona, the fol-
lowing note of the various
steps which have been taken
has been drawn up.

G.O. 4th Nov. 1884, No 1202
Rev.

In Oct. 1884 Dr Cornish, in
writing on a proposal to issue
crude cinchona bark for use in
the old manner, suggested
the preparation of a fluid ex-
tract of the bark, similar to
the preparations of Dr
De Vrij and Paul. This
suggestion was communicated
to Mr Lawson who reported
in Nov. /84 that Mr Hooper
was engaged in preparing a
quantity of Dr Vrij's extract,
and forwarded a gallon for
experimental use.

G.Os of 2nd Dec. 1884,
Nos. 1328 & 1329, Rev.

The Surgeon General
thru' the Public Dept.

1105C Forwarded

Edm. Hoff
Ag. Under Secy

Noted and
8th July /86.

1105C
1105C
1105C

2. The Surgeon Gen^l (Dr. Cornish) submitted his report on the trial of this preparation in March 1885. The extract was issued to six

G.O. 25th Mar. 1885, no 366
Rev.

hospitals, and Dr. Cornish stated that he was satisfied "that the preparation is one of very considerable value." He suggested

(1) That the concentration shd. be carried still further so that each fluid ounce might contain 40 grains of the alkaloids;

(2) That the preparation might be made more economically ~~made~~ at the Medical Stores Madras;

(3) That the papers shd. be sent to the Military Dept. for communication to the Surgeon Gen^l with H. M. Forces.

He estimated the amount of extract required by the Stores Depot to meet requisitions likely to arise at 1000 to 1500 lbs

The Govt. thereupon called

the cost of 35 for estimates of ~~for~~ manufacturing 1000 lbs of the extract at Madras and Ootacamund respectively; the papers were communicated to the Financial Dept. for consideration of the suggestion for the establishment under Local Fund Boards of an agency for distributing medicines among the people;

and lastly the Govt. expressed their opinion that the experiment of offering quinine for sale in 1/2 ounce bottles at taluk offices in selected districts shd. be made, and the Director was ordered to report whether Mr. Hooper could undertake the manufacture of a sufficient quantity with the means at his disposal.

G.O. 12th May 1885, no. 550 Rev.

3. On the 1st May 1885, Mr. Lawson reported that 1000 lbs of the liquid extract could be made at the Medical Stores

2. and the Govt. accordingly directed the manufacture of that quantity, Mr. Lawson having previously reported that the appliances in the Quinologist's Laboratory were not suitable for other than experimental purposes.

Mr. Lawson was also again asked to report as to the possibility of manufacturing quinine at Ootacamund, but in answering this reference he ~~fell into the error of thinking~~ that referred only to the manufacture of febrifuge, which he said could not be manufactured in any great qty. either by Mr. Hooper or at the Medical Stores. The Govt. pointed out the Director's error, but added that they presumed that the difficulties referred to would in connection with the manufacture of febrifuge would apply equally to that of quinine, and that

Mis. G.O. no 2087 of 24-4-85.

Para 5 of G.O. 12th May/85
no. 550, Rev.

G.O. 13th June/85, no. 717
Rev.

10
X Disposed of by G.O. Mis. no. 2087,
of 24th April/85.

G.O. 6th July/85, no 797 Rev.

G.O. 13th Oct./85, no 1155 Rev.

37
they awaited the report as to the cost of the necessary apparatus promised in the Director's letter of 15th April/85.

At the request of the Surgeon General sanction was given for an expenditure of Rs 200 on ~~some~~ the erection of "an apparatus for utilizing some of the existing evaporating pans in the depot"

[Note. This sanction was never acted upon. Please see G.O. Mis. no. 2935 of 19-5-86 Rev. & G.O. Mis. no. 3241 of 2-6-86]

In Sept. (30th) 1885 Mr. Lawson reported that the febrifuge was ready for issue, and the Govt. directed that the Surg. Genl. to arrange, in communication with Mr. Lawson for its distribution, and to report in due course on its efficacy. Dr. Funnell thereupon asked Govt. whether it was intended that the drug should

2. be issued for experiment
n only or for sale as well
or as experiment. He was
t informed that the febrifuge
e had already been tried in
h several, ~~and~~ hospitals, and
t that a portion of that recently
p manufactured should be issued
to ~~such~~ those Govt. hospitals
and dispensaries in which it
wd. prove useful while the
remainder shd. be offered
for sale at cost price. He
was also directed to report on
the efficacy of the fluid ex-
tract after it had been in
use for a period of six months.

It was further pointed out
that the quantity of fluid ex-
tract manufactured was that
yielded by 1000 lbs of bark,
while Govt. had ordered the
manufacture of 1000 lbs of the
~~extract~~ ^{fluid} itself. The manufacture
of the addl qty. was ordered
to be proceeded with.

G.O. 25th Jan. 1886, no 55 Rev.

12
Miss G.O. no 1401 of 1-3-86 Rev.

* Mr Lawson's letter of 24/6/86
no. 11

in the 'Note for Orders'

39.
With reference to this order
Mr Lawson represented that
this addl qty. shd. be made
at Ootacamund, as in the
manufacture of the former
batch there had been a loss
of alkaloids. This was
sanctioned.

The manufacture has now
been completed, as reported
in the earlier of the two cur-
rents under disposal.

It will be seen that the qty.
now manufactured is the balance
of that originally indentured for
by Dr Cornish, of which the
first instalment was ordered
to be distributed in G.O. no.
55 of 25th Jan. /86. It was
suggested that the second in-
stalment shd. be distributed in the
same way as the first.

The question of an agency
for the distribution of medi-
cines referred to by the Hon.

2017-8-86 718.

Required Exh. 1
Cinchona

Hon Mr Master

I presume the original
note for orders must
be followed as it has met
with the approval of Mr
& the Hon Mr Sullivan.

The present note ex-
plains several points
which were not clear when
the papers were pre-
viously circulated.

C.L.L.
13/8.

H.A.S.
11.8.86

I understood from Mr. Lumsden
that as soon as the disintegrator
& turbine sanctioned in G.O. 31 March
1886 No 257 are received Mr. Hooper
will be able to turn out any quantity
of the febrifuge which may be required
at Ootacamund and at a cost of
8 annas a lb, including 480 lbs.
of alkalis. When the production
of a large quantity is assumed
arrangements could be made for
distributing it.

W.L.

20-7-86
C/L-8-86
21-8-86
22-8-86
23-8-86

Department.

OF THE MADRAS GOVERNMENT.

Read the following

papers. C. Nos. 5062 & 6033

Order dated 18/8/7. 8-86.

The proposals of the Surgeon Genl
for the distribution of the febrifuge recently manufactured by Mr
Hooper are approved. Sanction
is also recorded to the request
of the Dir. of Govt. Cinchona Plantations
that he may be allowed to sell a
small quantity locally.

2. The Govt. await the report called
for in G.O. 25th Jan. /86, No 55 Rev.
In submitting that report the Sur.
Genl with the Govt. should state
what quantity he wd. recommend
should be manufactured annually.
An indent has already been for-
warded to the Secy. of State for
a disintegrator and turbine

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p

and as soon as these are received Mr. Hooper will be able to manufacture large quantities of the extract without difficulty

3. The papers will be communicated to the Surgeon Genl. & Mr. Forster, through the Military Dept. ^{for their instructions}

Has
14.8.86

by

- 5th. Govt. Botanist
- 6. Surgeon Genl with the Govt. of India
- 5. Public Dept. for comm. to the Principal Medical Stores
- 5. Financial Dept.
- 6. Army General
- 8. Military Dept. for comm. to the Surg. Genl. H. L. Forces.
- 16. Board of Revenue.

100
10.

5-7-86
2/5-8-86

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