

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 3382

Press

~~Misc~~

248.249

Dated

14 — 12 — 1866.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
14th December 1866.*

No. 248. Read the following Despatch from the Right Honorable the Secretary of State for India, (Public), to His Excellency the Right Honorable the Governor in Council, Fort Saint George, dated India Office, London, 17th October 1866, No. 34 :—

1. With reference to the recommendation contained in your Despatch to my predecessor, dated March 13th, 1866, that a Quinologist should be stationed at Ootacamund for three years, to investigate various questions connected with Chinchona cultivation, I have now to inform you that I have, at the recommendation of Dr. Frankland, appointed Mr. John Broughton to this post. Mr. Broughton has worked as Dr. Frankland's Assistant, at the Royal Institution in Albemarle Street, and I am assured by that eminent Chemist that he has been occupied with organic chemistry for several years, that he has made original investigations of his own, and that he is already intimately acquainted with the chemistry of the Chinchona plant.

2. I herewith transmit, for the information of your Government, a copy of a letter* which I have caused to be addressed to Mr. Broughton, informing him of

* Dated 22nd September 1866. the nature of the duties that will be expected from him, and directing him to report himself to the Secretary to your Government, in the Revenue Department, on his arrival at Madras. His appointment is for three years, and I have fixed his salary at 1,000*l.* per annum. I have also allowed him 150*l.* for outfit and passage, and a sum not exceeding 200*l.* for the provision of the necessary apparatus and chemicals, which will be shipped for transmission round the Cape.

3. It will be for your Government to decide, in consultation with Mr. McIvor and Mr. Broughton, whether the latter gentleman shall reside at Ootacamund or at the Neddiwuttum plantation; but it will be necessary to furnish, at one or other of those places, a room for a laboratory, with a smaller room opening on it, and a supply of water.

4. Mr. Broughton will leave England by the Steamer of the 20th of November.

5. I have also had under my consideration, in Council, your Despatch, in the Revenue Department, dated May 25th, No. 24, 1866, reporting your proceedings in connection with the appointment of a Commission for testing the value of Chinchona alkaloids, other than quinine, as febrifuges; and requesting that further supplies of the sulphates of these alkaloids may be transmitted to Madras.

6. The arrangements of Dr. Shaw, the Officiating Medical Inspector General of Madras, appear to be very judicious, with a view to testing the efficacy of Chinchonidine, Quinidine, and Chinchonine as cures for fevers; as well as for trying the bark, twigs, and leaves of the Chinchona, as simple decoctions. I am not, however, of opinion that it will be advisable, in the present state of our knowledge, to include quinine amongst the febrifuge alkaloids to be experimented upon by the Commission.

7. One hundred and fifty ounces of the sulphates of each of the Chinchona alkaloids have been ordered from Mr. Howard, and will be shipped for Madras as soon as they are delivered to the Stores Department of this Office.

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8. I also herewith transmit thirty copies of a pamphlet by Dr. Gustavo Planchon on Peruvian Barks, which has been translated from the French. Copies should be supplied to Mr. McIvor, and others who are engaged in Chinchona cultivation, as well as to Dr. Shaw and the members of the Commission appointed to report upon the Chinchona alkaloids.

From HERMAN MERIVALE, Esq., to JOHN BROUGHTON, Esq., Royal Institution, Albemarle Street, dated India Office, 22nd September 1866.

1. I am directed by the Secretary of State for India to inform you, that it is his intention to employ an Analytical Chemist to conduct investigations in concert with the Superintendent of Chinchona Plantations on the Neilgherry Hills; and that, at the recommendation of Dr. Frankland, he has resolved to offer you the appointment.

2. You will be under the orders of the Madras Government, from whom you will receive instructions, and to whom you will report the results of your investigations from time to time. It will not be necessary, therefore, to do more, on this occasion, than indicate very generally the nature of the duties that will be expected from you, and of the results that it is desired to secure from your labors.

3. The objects of the Government in introducing the cultivation of Chinchona plants into India, were the provision of an abundant and cheap supply of the febrifuge derived from them for the use of hospitals and troops in India, and the spread of Chinchona cultivation throughout the hill districts, in order to bring the remedy within the reach of all classes of the Native population. The oldest trees on the Neilgherries have now been planted out for nearly four years, and the analysis of their barks, which have been made by Mr. Howard, prove that there is a very marked increase of the yield of febrifuge alkaloids under cultivation. The time has now come, therefore, when it is necessary to investigate the causes which regulate the yield of alkaloids from cultivated Chinchona barks, and to ascertain the preparation of the febrifuge which will combine cheapness with efficacy in the greatest degree. To attain these very important objects, the Secretary of State considers that a scientific Chemist should be associated with the able and intelligent cultivator who now superintends the plantations.

4. The analysis of bark from plants growing in different situations by a competent scientific Chemist on the spot, will be a principal means of discovering the conditions as regards elevation, climate, soil, and exposure, best calculated to produce the largest possible yield of alkaloids, those conditions of course varying with the different species. There are several difficult questions connected with the formation of the alkaloids in bark, and particularly with the changes in the alkaloids themselves, caused probably by cultivation, which should be carefully and diligently investigated. It will also be an important duty of the Chemist attached to the Chinchona plantations, to ascertain the difference, as regards yield and efficacy, between green and dried barks, and to make accurate analysis of the leaves, and hereafter possibly of the flowers of the different species. The best method of drying the bark must be decided by scientific experiments; and, finally, it will be expected from the Chemist that he should, through his investigations, enable Her Majesty's Government to arrive at a decision with respect to the best and cheapest method of preparing the febrifuge for use among the laboring classes of the natives of India. He will also be required to consider the questions connected with the manufacture of the Chinchona febrifuge for the use of hospitals and troops in India.

5. Dr. Frankland has assured Lord Cranborne that you have been occupied with organic chemistry for several years, that you have made original investigations of your own, and that you are already intimately acquainted with the chemistry of the Chinchona plant; and His Lordship, therefore, feels justified in the expectation that you will prove competent to perform the difficult and important duties to which I have briefly alluded, in a way which will give satisfaction to the Government, and that you will advance a branch of science which, in its bearings on Chinchona cultivation, has now become of great economic importance.

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6. Your investigations should be carried on after consultation with the cultivator who is in charge of the plantations, and I am to impress upon you the great importance of acting, on every occasion, in concert with the Superintendent of Chinchona cultivation. It will be useful also if you were to put yourself in communication with the Medical authorities, with reference to the investigations which are now in operation with respect to the comparative value of the different alkaloids.

7. Your periodical Reports are to be made direct to the Madras Government.

8. You are required to undertake to serve the Government for three years, on a salary of £1,000 a year. You will be allowed a sum of £150 for outfit and passage, and a sum not exceeding £200 for the provision of the necessary apparatus and chemicals, which will be payable at this Office. The latter sum of £200 will be exclusive of freight and transit costs.

9. It is desirable that, in the event of your accepting this appointment, you should proceed to the Neilgherry Hills with as little delay as possible; and that you should arrange for the shipment of the laboratory previous to your departure from England.

10. On your arrival at Madras, you will report yourself to the Secretary to the Madras Government, in the Revenue Department.

No. 249.

ORDER THEREON, 14th December 1866, No. 3,382.

Miscellaneous.

1. Communicated, together with the enclosure, to the Superintendent of the Government Chinchona Plantations, and to the Principal Inspector General of the Medical Department.

2. Communicated also to the Accountant General with reference to paragraph 2 of the Despatch, and paragraph 8 of the enclosure.

3. With reference to paragraph 3 of the Despatch, Mr. McIvor will state whether suitable accommodation already exists or can be easily and cheaply provided for Mr. Broughton at Neddiwuttum. The Government are inclined to think that the best plan will be to constitute Ootacamund Mr. Broughton's head-quarters, at all events at first.

4. As the Secretary of State does not consider it advisable (paragraph 6) that quinine should be included amongst the febrifuge alkaloids to be experimented upon, no action need be taken by the Principal Inspector General, Medical Department, on paragraph 2 of G. O. 6th November 1866, No. 3,020.

5. The pamphlet referred to in paragraph 8 when received will be distributed as directed by the Secretary of State. The only two copies as yet received will be sent to the Principal Inspector General, Medical Department, and Mr. McIvor.

(True Extract.)

(Signed) J. D. SIM,

Secretary to Government.

To the Principal Inspector General, Medical Department.
.. the Superintendent Government Chinchona Plantations.
.. the Chemical Examiner.
.. the Board of Revenue.
.. the Secretary and General.

Exd. S. T. Augustin.

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14-December-1906

Communicated,
together with the
enclosure, to the
Super of the Good
Chunahua Plantation,
and to the Civil Super-
gen of the Good Dept.
Communicated
also to the Accountant
General with reference
to para 2 of the Dispatch
and para 8 of the Enclosure

In the reference to
para 3 of the Dispatch passed on the subject
the Secy will
State in the first
able acc
Orders will be
after

after the arrival of
Mr. Broughton

As the Secretary
of State does not
consider it advisable
(para 6) that Quinine
should be included
amongst the Strychnine
Alkaloids to be ex-
perimented upon, no
action need be taken
by the A. S. Dept. of
Medicine in para.
2 of G. O. 6 dated 1886.
No 3020.

The 30 copies
of the Pamphlet
to be in para 8 when
received will be
distributed as di-
rected by the Secretary
of State. The only two
copies as yet received will be sent to the
Supt. of Pub. Health Dept. & the
Hon. Secy.

already exists or
can be easily & cheaply
provided for Mr. Broughton
at the discretion.
The fact are inclined
to think that the best
plan will be to con-
stitute Ottawa around
Mr. Broughton's Head
Quarters, at all events
at first.

[Handwritten signature]

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- 2) To the Hon. Secy. Medical Dept. Sept 15th
- 100y Laphie Laphie Govt Chem Plantations
- 1 - Chemical Examination
- 1 - R. of Res.
- 6 - Asato Goul

Albion 1866 Department
of Govt for November

N^o 3382

of the illudragant
of 16th November 1866

Despatch from
Home Government re-
garding the appointment
of Mr. Drington, as
Quinologist, with orders
thereon.

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