M.R.O. 1—20,002—12-8-65.

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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 1094. Press

B.P. No. Mis.

Dated 28-8-1874 196

Not to be folded or roughly handled

Read the following letter from Surgeon-General E. G. BALFOUR, Surgeon-General, Indian Medical Department, to the Secretary to Government, Revenue Department, dated Fort St. George, 20th August 1874, No. 377 :—

THE Right Honorable the Governor in Council, in G. O., No. 984, of 6th instant, requested me to obtain from the Chemical Examiner a report on the deteriorated amorphous quinine on the stock of the depôt of Medical Stores. But the instant that the drug was reported to me to become altered in its physical character, I at once (as will be seen by the marginal note of correspondence) exhausted all the means at command to obtain the restoration of the drug to its normal condition, but I failed, and, as mentioned in my letter, No. 349, of 3rd instant, I have been awaiting Mr. Broughton's return, in order to bring the subject to his notice.

1874, No. 174, of 28th April, Principal Medical Store-keeper reports a chemical change in the [illegible] amorphous quinine.
1874, No. [illegible] of 29th April, Surgeon-General orders a bottle of it to be sent to the Chemical Examiner.
1874, No. 210, of 1st May, Principal Medical Store-keeper to Chemical Examiner, sending same.
1874, No. 215, of 1st May, Principal Medical Store-keeper reporting dates of receipt.
1874, No. 241, of 5th May, Principal Medical Store-keeper reporting failure to re-powder the mass.
1874, No. 153, of 8th May, Chemical Examiner reports might be utilised as a tincture.
1874, No. 278, of 9th May, Principal Medical Store-keeper sends in report.
1874, No. 315, of 13th May, Principal Medical Store-keeper has tried to make it into pills.
1874, No. —, of 3rd June, Superintendent, Alkaloid Manufactory, reports its suitability.
1874, No. 492, of 5th June, Principal Medical Store-keeper, says in this climate cannot be powdered.

2. The quantity received on the last two occasions (13th February and 16th April 1874) amounted to lbs. 53¾, and in April last, when the bottles were taken up to be used, the contents were found to be clotted into a resinous mass, which it was impossible to remove from the containing bottles. The Principal Medical Store-keeper, therefore broke one and reduced the contents to powder, but within a few minutes it set firmly concreted into a resinous mass. The Chemical Examiner also broke a bottle to obtain a sample, and the only suggestion he could offer for utilising the drug was to make it into a tincture with rectified spirits in the proportion of one ounce of the resin to a pint of spirit; but the Cinchona alkaloids are not prescribed in that form, and the Chemical Examiner reported that it was not perfectly soluble, as there was such turbidity, and he had to recommend that the words "shake the bottle" should be put on the label. The Principal Medical Store-keeper being then told to try some other plan, he attempted to make it into pills, but they would not retain their shape, and ran into each other, and the only practical solution of the difficulty seemed to be to await Mr. Broughton's return, as it was probable that he would re-form the substance into its normal pulverulent condition.

After this a quantity was sent to the Superintendent, Alkaloid Manufactory, Ootacamund, who broke the bottle, and, after carefully examining and testing the contents, failed to detect any resin in it, found it to be easily pulverised, and in that state to resume its original color, and the only suggestion he could make was to break the bottles, powder, and distribute the contents. But the Principal Medical Store-keeper found the suggestions of the Superintendent of the Alkaloid Manufactory to be in this instance impracticable, as the substance is here so sticky, it cannot be so reduced or, if powdered after a short time, it again assumes the form of a resinoid mass, firmly adhering to the sides of the containing vessel. After this last reference, as mentioned

Proceedings of the Madras Government, Revenue Department,
28th August 1874.

in my letter of 3rd instant, No. 349, ordered the subject to lie over until Mr. [illegible] return, which, it is understood, will be in a few days.

No. 268. ORDER THEREON, 28th August 1874, No. 1,094.

Miscellaneous.

COMMUNICATED to the Government Quinologist who will report on the subject at as early a date as practicable.

(True Extract)

(Signed) C. G. MASTER,
Acting Secretary to Government.

To the Government Quinologist.
" the Surgeon-General, Indian Medical Department.
" the Sanitary Commissioner.
" the Commissioner of Nilgiris.

Prd. by L. Bantleman.

No. 377

OFFICE OF THE INSPECTOR-GENERAL, I. M. D.,
Fort Saint George, 20th *August* 1874.

From *Surgeon General Edward Balfour*
THE INSPECTOR-GENERAL OF HOSPITALS,
Indian Medical Department,
Fort Saint George

To *The Secretary to Government*,
Revenue Department,
Fort Saint George.

Sir,

The Right Honorable the Governor in Council in G.O. No. 984 of 6th Instant requested me to obtain from the Chemical Examiner a report on the deteriorated Amorphous Quinine, on the stock of the Depôt of Medical Stores. But the instant that the drug was reported to me to have become altered in its physical characters, at once (as will be seen by the marginal notes of correspondence) I exhausted all the means at command, to obtain the restoration of the drug to its normal condition, but I failed, and as mentioned in my letter, No. 349 of 3rd Instant, I have been awaiting the Chemist's return, to

1874.	No. 174 of 28th May.	Principal Medical Storekeeper	reports a chemical change in the last received amorphous Quinine.	
"	" 254 of 2nd June.	Surgeon General	orders a bottle of it to be sent to the Chemical Examiner.	
"	" 210 of 1st May.	Principal Medical Storekeeper	to Chemical Examiner sending same.	
"	" 215 of 1st May.	" "	" reporting dates of receipt.	
"	" 241 of 5th May.	" "	" reporting failure to powder the mass.	
"	" 153 of 8th May.	Chemical Examiner	reports might be utilized as a tincture.	
"	" 270 of 13th May.	Principal Medical Storekeeper	sends in report.	
"	" 315 of 15th May.	" "	has tried to make it into pills.	
"	" 3rd June.	Supt. Alkaloid Manufactory	reports its excitability.	
"	" 4 of 6th June.	Principal Medical Storekeeper	says in this climate cannot be powdered.	

1874 No. 377
Office of the Inspector-General, I. M. D.,
Fort Saint George, 20th August 1874.
From Surgeon General Edward Balfour
The Inspector-General of Hospitals,
Indian Medical Department,
Fort Saint George
To The Secretary to Government,
Revenue Department,
Fort Saint George
Sir,
The Right Honorable the Governor in Council in G.O. No. 984 of 6th Instant requested me to obtain from the Chemical Examiner a report on the deteriorated Amorphous Quinine, on the stock of the Depôt of Medical Stores. But the instant that the drug was reported to me to have become altered in its physical characters, at once (as will be seen by the marginal notes of correspondence) I exhausted all the means at command, to obtain the restoration of the drug to its normal condition, but I failed, and as mentioned in my letter, No. 349 of 3rd Instant, I have been awaiting the Chemist's return,
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" " 3rd June. Supt. Alkaloid Manufactory reports its excitability.
" " 4 of 6th June. Principal Medical Storekeeper says in this climate cannot be powdered.

Oct. of 1874 Govts.
Of Revenue.
The Government Quinologist, &c., &c., &c.

Dated August 1874.
Read
Ent.
Dy. Sec. to Govt. 21st August 1874, No. 1004.

AUGUST.
Nos. 267-268.

Returned Amorphous Quinine on the stock of the Medical Store Depôt [illegible] to the Government Quinologist [illegible] from the General Indian Medical Department [illegible]

order to bring the subject to his notice.

2nd The quantity received on the last two occasions (13th February and 16th April 1874) amounted to the 53½ mixtures. April last sixteen six bottles were taken ill hope used, the contents were found to be clotted into a resinous mass, which it was impossible to remove from the containing bottles. The Principal Medical Storekeeper therefore broke one and reduced the contents to powder, but at the end of a few minutes it again firmly consolidated into a resinous mass. The Chemical Examiner, also, broke a bottle to obtain a sample, and the only suggestion he could offer for utilizing the drug was to make it into a tincture with Rectified Spirits, in the proportion of one ounce of the drug to a pint of spirit; but the Cinchona Alkaloids are not prescribed in that form and the Chemical Examiner reported that it was not perfectly soluble, as there was much turbidity. He had to recommend that the words "Shake the bottle" should be put on the label. The Principal Medical Storekeeper being then told to try some other plan, he attempted to make it into pills, but they would not retain their shape, and ran into each other, and the only practicable solution of the difficulty seemed to be, as suggested by Mr. Broughton's letter, as it was probable that he could re-form the substance into its normal condition by

3rd After this a quantity was sent to the Superintendent of Cinchona Plantations, Ootacamund, who broke the bottle and after carefully examining and testing the contents failed to detect any reason why it should not be pulverized, and in that state, to restore its original colour and virtue. The only suggestion he could make was to break the bottles, powder and distribute the contents. But the Principal Medical Storekeeper found the suggestions of the Superintendent of the Cinchona Plantations, to be in this case impracticable, as the substance is here so sticky, it cannot be pulverized, or if pulverized after a short time it again assumes the form of a Resinoid mass, firmly adhering to the sides of the containing vessel. After this last reference, I mentioned in my letter of 3rd instant, that I had ordered the subject to be over until Mr. Broughton's return, which it is understood will be in a few days.

I have the honor to be
Sir,
Your most obedient Servant,
C. Macpherson Surgeon General
Surgeon General
Indian Medical Dept

No. 2853.

Revenue 187 Department

From Surgeon General E. Balfour
Acting Inspector-General of Hospitals.
Indian Medical Department
Fort Saint George

To

The Secretary to Government
Revenue Dept.
Fort St. George

Dated 20th August
Despatched do
Received 22

No. 11

Subject.

Reports, in reference to G.O. No. 95 of 6th instant, on the deterioration of Amorphous Quinine, in the Stock of the Medical Store Depot.

No. 1094

Communicated to the Inspector General ...

Initial order

2/31/8/74