M.R.O. 1—30,000—18-10-30.

# MADRAS RECORD OFFICE.

## Government of Madras.

Revenue DEPARTMENT.

G.O. No. 3-12-2 Press Mis.

Dated 7 Mar 1931

***Not to be folded or roughly handled***

*Proceedings of the Madras Government, Revenue Department, 7th September* 1869.

No. 125. Read the following letter from the Officiating Under Secretary to the Government of Bengal, (General,) to the Secretary to the Government of Madras, dated Fort William, 9th August 1869, No. 2,844 :—

In continuation of letter, No. 1,625, dated the 23rd April last, I am directed to forward to you the accompanying copy of a letter* from the Officiating Superintendent of the Botanical Gardens, and to request that, with the permission of His Excellency the Governor of Madras, you will desire Mr. Broughton to be so good as to comply with the wishes of the Superintendent of the Botanical Gardens, and furnish him with the information he wants.

* No. 137, dated 31st July 1869.

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No. 126. From C. B. CLARKE, Esq., M A., Officiating Superintendent, Botanical Gardens, and in charge of Cinchona Cultivation in Bengal, to the Secretary to the Government of Bengal, dated Botanic Gardens, 31st July 1869, No. 137.

At the request of the Government of Bengal, there was forwarded in April last samples of Cinchona bark grown at Rungbee near Darjeeling, and also of the soil in the Government Cinchona Gardens there, to Mr. Broughton, the Government Quinologist in Madras, for analysis.

2. I should also be very glad to receive the result of his analysis, more especially of the barks.

3. I should also be glad if Mr. Broughton would kindly supply his advice and opinion, so far as at present formed, on the practical manufacture of quinine from the bark, and more particularly on the following points :—

(*a.*) In the first stage of the manufacture (*i.e.*, the precipitation of all the alkaloids mixed with chalk), what is the most economical acid to use on the large scale ?

(*b.*) In the practical manufacture, what is the minimum per-centage of such acid (with respect to the quantity of water and weight of bark) which can be employed ?

(*c.*) With this minimum per-centage of acid, how near to the total absolute quantity of alkaloids in the bark can the exhaustion of the bark of its alkaloid be carried with practical economic advantage ?

(*d.*) And, working with this minimum of acid, in what proportion ought the alkaloids to be mixed with chalk as the result of the first process, if conducted in the most approved manner ?

(*e.*) Any other details which Mr. Broughton's experience can furnish for the economic carrying out of this first stage of manufacture ?

(*f.*) Whether Mr. Broughton is now aware of, or thinks it probable there will be discovered any improvement in the subsequent alcoholic and sulphuric processes which will materially reduce the present great expense of those processes ?

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No. 127. ORDER THEREON, 7th September 1869, No. 2,527.

Miscellaneous.

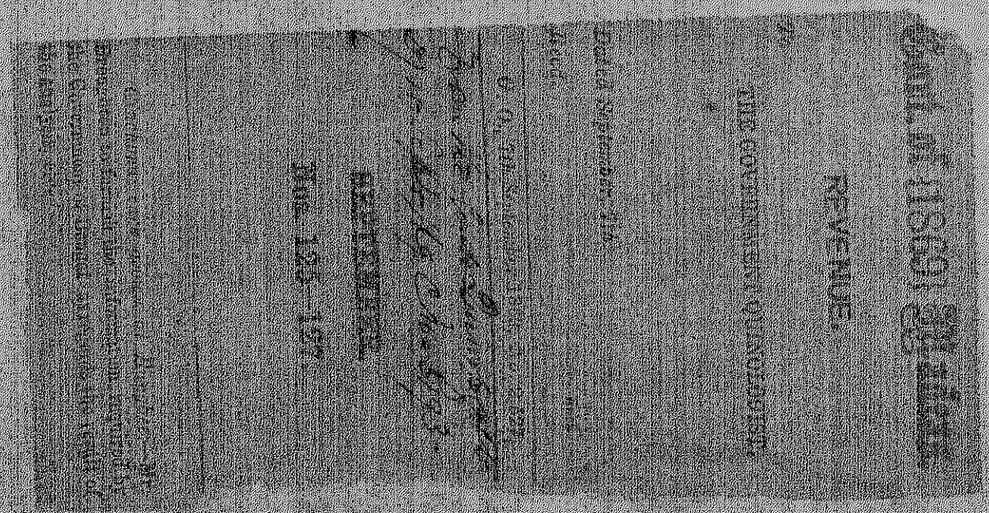
COMMUNICATED to the Government Quinologist, with reference to the order of Government, dated 18th May 1869, Mr. Broughton will be requested to furnish information on all the points specified in the letter from Mr. C. B. Clarke, Officiating Superintendent, Botanical Gardens in Bengal, to the Secretary to the Government of Bengal, dated 31st July 1869.

(True Extract.)

(Signed) R. A. DALYELL,
*Acting Secretary to Government.*

To the Government Quinologist.

Exd. F. R. Bantleman.



Revenue Department

No. 2527

**PROCEEDINGS of the MADRAS GOVERNMENT.**

Dated 7th September 1869

Read the following Letter from the Offg Secy to the Govt of Bengal

Forwarding copy of a letter from the Offg Superintendent Botanical Gardens, Bengal, requesting to be furnished with the result of the Experiments on Principles of Chicory or a Substitute grown at Ootacamund

Dated 9th August 1869. No 20864.

Communicated to the Government Botanical Gardens with reference to the Correspondence noted in the Margin and requesting that the result of the Experiments on the Chicory plant may be furnished to this Government at an early date

The fourth Enclosed
in the Letter from
the H.E. Carter,
Offg Sub.t Station
Saugor in Bengal,
to the Secretary to
the Govt of Bengal
dated 31st July 1819.

Lieut Genl Lumsden Agent