M.R.O. 14–5,450—22-10-25.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1069-1070 Press ~~Mis.~~

175 176

Dated 13—5—1867.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 13th May 1867.

No. 175. Read the following Proceedings of the Board of Revenue, dated 25th April 1867, No. 2,530:—

Read the following Proceedings of the Madras Government, dated 5th March 1867, No. 554, Revenue Department.

ABSTRACT.—Requesting the Board to expedite their reply to Government Order, 5th October last, calling for certain information on the resinous products of India.

1. With their Order, dated 5th October 1866, No. 2,672, the Government communicated to the Board a Circular from the Secretary to the Government of India, Public Works Department, (Revenue Forests,) to the Secretary to the Government of Madras, (Revenue Department,) calling attention to the deficient supply of resin and tar in the Home market.

2. It was observed that this deficiency was caused chiefly by the decrease in the import of these articles from America since the commencement of the late Civil war, and it was suggested "that India might derive profit from turning her attention to this branch of industry."

3. The Board was called on to furnish a report on the subject, and they accordingly communicated the Government Order to the Collectors and others named in the margin. Of the ten reports thus called for, seven only have as yet been received, but with reference to the Government Order quoted at the head of these Proceedings, the Board will no longer delay their report imperfect as it necessarily is, and will supplement it with further information when the three reports referred to are received.

The Officiating Conservator of Forests.
The Superintendent of the Government Central Museum.
The Chamber of Commerce.
The Madras Trade Association.
The Collector of Ganjam.
Do. of Vizagapatam.
Do. of Madura.
Do. of Tinnevelly.
Do. of Canara.
Do. of Malabar.

4. All the reports hitherto received agree in shewing that gums and dammers abound especially in the forests of the Western Ghauts, but that owing to the absence of any demand for them, they are not gathered in any quantity.

Letter dated 10th November 1866, No. 843.

5. The Collector of Vizagapatam considers that the only way of increasing the supply for the Home market is to increase the local demand, and that any quantity is available in Jeypore and the Hill tracts.

Letter dated 16th November 1866, No. 2,080.

6. The Officiating Conservator of Forests reports more particularly on the various kinds of gum-producing trees to be found in the forests of the Western Ghauts. He mentions the trees producing the black and white dammers as being especially valuable, and states that these gums are collected occasionally by the hillmen, as is also the resin procured from the "Ailanthus Malabaricus," a tree which is very abundant in Travancore.

Letter dated 3rd January 1867, No. 6.

7. The Collector of Tinnevelly reports in a similar manner of his district, and names the Karuvelan, Odai, and Vepen trees as yielding gums abundantly, and as being also plentiful in Southern India, and at the request of the Board,

conveyed in their Proceedings dated 23rd November 1866, No. 8,445, he has forwarded specimens of these gums, which are herewith submitted to Government.

* Letter dated 31st January 1867, No. 136.
† Do. ,, 6th February ,, ,, 23.

8. The Collectors of Ganjam* and South Canara† have reported in a manner similar to the foregoing, the Collector of Ganjam particularizing the Sál tree which produces the dammers and grows abundantly in Gumsoor and the Khond hills. The report from South Canara includes a list of the gum-producing trees of the district, and the Collector having suggested a reference to the Conservator of Forests as to the best mode of increasing the supply of these substances, his letter was forwarded to that Officer with Board's Proceedings, dated 12th February 1867, No. 842.

Letter dated 11th March 1867, No. 2,257.

Aradal.....	Garcinia Cambogia (Gamboge.)
Manda Dhoop.	Canarium Strictum (black dammer)
Dhoop.....	Valeria Indica (white dammer.)
Googal Dhoop.	Ailanthus Malabaricus.
Oopal kai.....	Macaranga tomentosa.
Bengha.....	Pterocarpus Marsupium.
Banapu.....	Terminalia tomentosa.

9. Captain Beddome, in reply, states that he is preparing samples of the gum-resins named in the margin, and suggests that these should be forwarded to the Home Government, with a request that they will furnish full information as to the market value of each, and also the probable extent of demand for them.

10. The Collector of Madura forwards, with his report, a list of twenty different kinds of dammer, resins of gums, procurable in his district, and states that if the people were aware of the great demand for such articles, he believes that the petty traders who barter rice, salt, &c., for hill products, would undertake to supply them.

11. He, however, expresses a strong objection to renting these products as a means of increasing their supply.

Letter dated 2nd February 1867, No. 27.

12. The Collector of Malabar states that he has purposely delayed his report till after the local exhibition, where samples of the gums, &c., are likely to be shewn.

Letter dated 19th November 1866, No. 227.

13. The Superintendent of the Government Central Museum has forwarded a list of the samples of resins contained in the Museum, a copy of which is herewith forwarded for the information of Government. The Board recommend that Captain Beddome's suggestion be acted on, and that a complete collection of the different gums of this Presidency be made without delay and forwarded to the Home Government, in order that the value of each and its suitability to the English market may be practically tested, and made generally public.

14. Each sample should not be less than 10 lbs., and should be accompanied by full details of cost of production and conveyance to the nearest sea-port; quantity annually available; local and mercantile name; purposes for which they are applied or deemed applicable, &c., &c.

15. Duplicate samples, with the like information, should be deposited in the Museum.

16. It may be hoped that the attention of the Mercantile community may thus be drawn to the subject, and the rich resources of the country in these products

Proceedings of the Madras Government, Revenue Department,
13th May 1867.

be developed and utilized. The great object is the creation of an active and steady local demand.

No. 176. ORDER THEREON, 13th May 1867, No. 1,069.

Miscellaneous.

1. Resolved that the above report, with copies of the letters and lists therein alluded to, be transmitted to the Government of India, together with the specimens of the Tinnevelly gums, with reference to their Circular dated 30th August 1866, No. 11F.

2. The Government approve the suggestion of Captain Beddome that samples of certain gum-resins be forwarded to the Home Government, with a request that they will cause full information as to their market value, and the probable extent of demand for them to be obtained and furnished, and the Conservator of Forests will instruct that Officer to complete the collection at an early date, and to submit it to Government with all the necessary information. Attention should be paid to the points specified by the Board in paragraph 14 of their Proceedings.

3. Captain Beddome will also prepare a duplicate set of the samples of the resins for deposit in the Museum, as suggested by the Board in paragraph 15.

(True Extract.)

(Signed) W. HUDLESTON,
Secretary to Government.

To the Board of Revenue.
,, the Conservator of Forests.

Exd. J. Tulloch.

REVENUE DEPARTMENT.
FORT SAINT GEORGE,
13*th May* 1867.

No. 1,070.

No. 177.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

Miscellaneous.

1. With reference to your Circular dated 30th August 1866, No. 11F, I am directed to forward to you herewith, for submission to the Government of India, copies of the Board's Proceedings, dated 25th April 1867, No. 2,530, and of the reports of the local Officers therein alluded to, regarding the resinous products procurable in the different provinces of this Presidency. I forward also specimens of Karuvelan (Babul) and Vepen (Nimtree) gums collected in the Tinnevelly District.

2. The reports of some of the Officers are still due, and will be transmitted to you as soon as received.

3. The Government of India will observe that instructions have been issued for the preparation of two sets of the important gum-resins produced in this Presidency, one for transmission to the Home Government with all the necessary information, and the other for deposit in the Madras Museum.

I have the honour to be,
Sir,
Your most obedient servant,
(Signed) W. HUDLESTON,
Secretary to Government.

Exd. J. Tulloch.

Memo

Forwards a revised Copy of Memorandum in Reply to Counter-Case to Memo dated 13th Instant.

A Clarke

Under Secy of State for Colonies

Applicants

To the Attorney Genl

morandum on some points in=

attention to the subject of this Memorandum.- It appeared to me then, that an incorrect and somewhat exaggerated notion prevails both in England and among many even in this Country, concerning the resources of the Western Jungles in unapplied Vegetable products.- Among the gums and resins produced in these districts which are practically or even entirely unKnown to European Commerce, it is easy to make a most tempting and extensive Catalogue, comprising some products of much intrinsic interest and if obtainable at moderate cost, of considerable commercial importance.- Too many of these however are only procurable in small quantities and with difficulty.- Of those of greater abundance and whose properties would indicate them as suitable materials of export

export trade, I fear in too many cases the cost of collection would render the price too high to enable them to compete successfully with the better known substances in the European Market whose uses are similar.- Again I learn that experience has generally shewn that an increased demand for local Jungle products has caused such an advance in the local price that the trade ceases to be profitable.

Resin of Vateria Indica White dammer or piney resin.- This beautiful substance has long been known, and its properties and local uses have been repeatedly described.- It is also not unKnown in England, and I apprehend that its cost (and perhaps also ignorance of its peculiar properties) has prevented its becoming an article of more extended commerce.- It should be remarked that the

the "East Indian dammer" which is well known among Varnish makers, though frequently confounded with this, is the product of a very different tree and is not produced in this presidency.- The finest specimens of piney resin are obtained by making incisions in the tree and are in pale green translucent pieces of considerable size - The resin that exudes naturally usually contains much impurity. In most of its properties it resembles Copal, but it posesses qualities which give it some advantages over the latter. Like Copal it is but slightly soluble in alchol, but as Berzelices pointed out in the case of Copal, it can be brought into solution by the addition of Camphor to the spirit. It is easily soluble in chloroform, and thus might find a small application

as

as a substitute for Amber in photographers' Varnish - It differs most advantageously from Copal by being at once soluble in turpentine, and drying oils without the necesity of the preliminary destructive fusion required by that resin, a process which tends greatly to impair the color of the Varnish. The solution of the piney resin in turpentine is turbid and milky, but by the addition of powdered charcoal and subsequently filtering, it yields a solution transparent and colorless as water and yields a Varnish which dries with a purity and whiteness not to be surpassed.- The solution in turpentine readily mixes with the drying oils. It is on these properties of the resin that its chance of becoming an article of trade will depend.- In price it cannot compete with Copal whose supply to the

the European market is regular, and abundant.- Major Beddome informs me that the cost of piney resin, delivered on the Sea Coast would be about Rs. 6 per maund of 25 lbs. The present price of the best Copal in the English market is but £ 2.10.0. per Cwt.

Piney resin yields on destructive distillation 82 per cent of a pluorescent oil of agreeable odour, but not differing essentially from that obtained from cheaper resins.

Resin of Ailanthus Malabaricus Muttipal.

This resin as commonly met with is dark brown or grey in colour is plastic opaque and has an agreeable smell.- It contains much impurity. The pure resin is very soft having the consistence of thick treacle, and this is doubtless the reason why it is always

mixed

mixed with fragments of wood and earth which make it more easy to handle. The sample which I examined contained but 77 per cent of resin. The remainder being adulterations. Alcohol readily dissolves the resin and on evaporation leaves it as a very viscous, transparent light brown semi-liquid, which does not solidify by many days exposure to a steam heat, when burnt it gives out a fragrance, and hence it is sometimes used for incense. Its perfume is however inferiar to that produced by many other resins employed in the concoction of the incense employed in Christian and Heathen worship.- The peculiar consistency of the resin would enable it to substitute Venice turpentine for many purposes though its price (Rs. 6 per 25 lbs in the crude state) forbids an extensive employment. A

substitute

substitute for Venice turpentine in India is, mentioned as a desideratum in the Reports of the Juries of the Madras Exhibition of 1855 Class IV.

Resin of Canarium Strictum Roxb. Cap.

a Black dammer - This well known substance offers little chance of usefulness in Europe at least when the many resins are considered, that are found in the market at a far less price. It is used in this Country for many small purposes as in the manufacture of bottling wax, Varnishes &c. Its colour when in solution is fine, if compared with its dark tint when in mass. Thus though insoluble in spirit, its solution in turpentine forms a tolerable Varnish. When submitted to destructive distillation it yields about 78 per cent of oil resembling that obtained from Common Colophany. But I fear in the majority of its possible applications it possesses few advantages over ordinary resin at 7/. 6d. per Cwt. Major Beddome estimates the price of black dammer on the Coast of Canara at Rs. 8 per 25 lbs (or nearly ten times the price of resin in England). The number of substances suitable for coarse Varnishes have lately become very numerous in Europe. Common resin is now purified by a patent process consisting of distillation with superheated steam by which it is obtained nearly as transparent, and colorless as glass, in such amount that a single firm turns out 60 tons per week.

Gum resin of Garcinia gambogia, ardal or Gamboge - This gamboge though produced by a different tree to those which yield

yield the Siam and Ceylon gamboge appears nevertheless exceedingly similar and to be of fine quality.- An estimation of the amount of coloring resin which is the essential constituent gave a yield of 76 per cent, the remainder consisting of gum and starch. The specimen I received was in small lumps and differed thus in external appearance to the Commercial Specimens I have seen, but in quality it can well compare with them.- The yield of ordinary gamboge in coloring resin varies from 40 to 75 per cent.- Gamboge is used as a pigment in the manufacture of lacquers and in Medicine. The price of the Canara gum is a rupee per pound. I believe the English wholesale price is £3 8. per Cwt. as a Commercial product this gamboge appears to promise well. I believe

56 lbs to the cwt.
£5..12

some time ago Dr. Cleghorn was led to pay much attention to this Substance.

Gum of Pterocarpus Marsupium. "Kino."

This astringent gum is well known both in this Country and Europe and is already a considerable article of Commerce from the ports of the Western Coast. Indeed the trade in this substance does not appear to be capable of much extension notwithstanding the abundance of the supply obtainable, the demand being but limited.- Mr. Mansbury informed me sometime ago that good samples of East Indian Kino were only procurable by chance but judging from the large quantities of fine quality that I lately saw packed for export from Calicut this can no longer be the case. The properties of this gum have long been known and are found described in the ordinary text books.-

(Signed) J. Broughton
Quinologist to Government

(A true Copy)
R. Maclennan Major
Offg Conservator of Forests.

Revenue Department

P. 1069.

Proceedings of the Madras Government.

Under date the 13th May 1867.

Read the following Proceedings of the Board of Revenue -

Submitting with remarks certain information respecting the resinous products of India. - (Received 25th April 1867 No. 2530)

Resolved that the Board report ~~list~~ copies of the letters and lists therein alluded to be transmitted to the Govt. of India together with the specimens of the Tinnevelly gums, with reference to their Circular dated 30th August 1866, No. 11. F.

2. ~~After~~ the suggestion of Captain Beddome that samples of certain gum-resins, be forwarded to the Home Govt. with a request that they will cause full information as to the market value of ~~each~~, and ~~also~~ the probable extent of demand for them

Enclosure in a letter from the Offg. Conservator of Forests to the Secretary to Government R. dated 2nd June 1868. No. 794.

To

The Revenue Secretary to Govt.

them ~~to be approved~~ approved by the Government, and the Conservator of Forests will be desired to instruct their officer to complete the collection at an early date and to submit it, to Govt with all the necessary information. etc

Attention should be paid to the points specified by the Board in paras 14 of their Proceedings.

3- Captain Beddome will also prepare a duplicate set of the samples of the resins for deposit in the Museum as suggested by the Board in paras 15.

14 Copies Lr Bd. Dept Revd Dec 2nd 14
4 ——— Conservator of Forests

13th May 67

Revenue Department

8th 1870.

To

The Secretary to the
Govt of India,
Home Dept.

Sir,

With reference to
your Circular dated
30th August 1866, No 1136,
I am directed to forward
herewith, for submission
to the Govt of India as
supplies of the Products
noted in the margin
dated 25th April 1867,
No 2530, and of the
Forest Officer
Conservator of the Godavery
Forest Division
Nos 1754/176

Reported to England
D/ 13th Sept. No. 30 of 1867 Sel. Trans.

Revenue 1867 Depart.
Pro: of Govt for May

No. 1069

Pro: of the Madras Govt.
D/ 13th May 1867

Rd Board of Revenue
D/ 10 August D. No. 2187

From — D. 31 March/68 No 1136

Directing the
transmission to the Govt.
of India of a report of the
Board of Revenue on the
resinous products of
this country, together
with the Specimens of
the Trincavelly Gums,
and approving the pro-
posal to send samples
to the Home Govt.

Gen No. 102-103
5-10-66
" 103-104
5-3-67

(Babul)
of Karuvelan, and Vé-
(Nimtree) ^ colouring
-pen gums ~~produced~~
in the Tinnevelly District.-

2- The reports of some of the officers are still due & will be trans-
-mitted to you as soon as received.-

3- The Govt of India will observe that instruc-
-tions have been issued for the preparation of two sets of the important gum drugs produced in this Residency, one for transmission to the Home Govt with all the necessary information, & the other for deposit in the Madras Museum-

GR

30/11

Ed Balfour

Reported to England
D/ Fr. Sept. 23 of 1868 Mis. Forms.

Revenue 1867 Depart.
Pro: of Govt for May

No 1070

To The Secy to the Govt of
India Pub Works Depart
D/ 13th May 1867

Forwarding Reports &
Plan of Embankment of the
Reservoir proposed to be built
in the Guinea Valley District
& stating that one hundred
[redacted] rupees
will be required for the Works
which [illegible] from the Supply

No 177