M.R.O 14 - 6.4.51.—22-10-25.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 687 Press Mis.

Dated 24 — 4 — 1857.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 24th August 1867.

No. 481. Read the following Proceedings of the Board of Revenue, dated 10th August 1867, No. 5,133.

Read the following letter from the Acting Secretary to the Chamber of Commerce, to the Secretary to the Board of Revenue, dated Madras, 20th June 1867:—

With reference to the Proceedings of Government, Revenue Department, dated 5th October 1866, I am directed by the Chamber of Commerce to forward, herewith, copy of an interesting report on the Resinous Products of India from Dr. Hunter, Superintendent of the School of Arts, to whom the Chamber referred the above Proceedings.

From A. HUNTER, Esq., M. D., Superintendent of the School of Industrial Arts, to the Secretary to the Chamber of Commerce, dated Madras, 17th April 1867.

In reply to your letter of the 13th instant, enclosing Proceedings of Government, Revenue Department, dated 5th October, No. 102, on the subject of the deficient supply of Resin and Tar, I have the honor to inform you that the subject is one of great importance to the further prospects of Southern India, as many of the jungles and hill tracts of this Presidency produce trees that abound in Resin, Turpentine, or similar Gum Resins. I have turned my attention to this subject, and we have been using several of the Oils, Resins and Dammars of this Presidency as substitutes for Turpentine, Resin and Pitch in painting, varnishing, and making models of figures and casts of heads and hands and feet of the different tribes.

1. The Vateria Indica yields an abundance of White Dammar, or Dhoop Resin, largely exported from the West Coast to Bombay and to England, for shipping purposes.

2. The Canarium Strictum yields a hard Black Dammar superior to the Resin of Europe and commanding a higher price, as it is useful for varnishes, and as a substitute for oil paint.

3. The Vatica Tumbagaia, abundant in the Palghaut jungles, yields a Green Dammar also harder than Resin. These three can all be mixed with drying oils, turpentine or wax, and are suited for preserving wood, varnishing, painting metals, and for modelling, casting, and founding, to which purposes I have frequently applied them.

4. The Shorea robusta, or Saul, which grows abundantly in the Northern Circars, yields the Ral or Dhooma Resin, a good substitute for Pitch, that has been tried in the Marine yards.

5. The Boswellia glabra, which grows in the jungles of the Dekkan and the Eastern Coast, yields a Resin called Kondricum, which makes a good substitute for Pitch or Resin, and can be mixed with linseed or other drying oils as a varnish.

6. The Dipterocarpus angustifolius, or Tilyagurjum, yields a resinous oil known in commerce as wood-oil, and much used as a varnish and substitute for turpentine in dissolving Dammar, Pitch, or Resin.

7. The Dipterocarpus laevis of Coorg, Rangoon, and the Malay Peninsula, yields another variety of wood-oil used as a varnish for preserving wood and metals.

8. A great source of Resins and Turpentines that is as yet little thought of in Southern India is the class of Coniferous and other trees of the genera Cupressus, Casuarina and Encalyptus, that have for some years been largely propagated at Madras, Bangalore, and most of our hill stations. These are now thoroughly established and acclimatized. From these Turpentine, Tar and Pitch could easily be manufactured, and on a large scale if requisite. The new species Pinus Maritima, of which a large quantity of seed has lately been procured from Europe, and distributed by the Agri-Horticultural Society, is another fertile source of Tar and Resin.

9. In addition to these, there are other sources of Tar that have been very much neglected in India, but which might be turned to account if desired: see Illustrated Report on making Tar from chips and shavings of Pinewood, described by Dr. Cleghorn as followed by the hill tribes of Upper India with common chatties).

Proceedings of the Madras Government, Revenue Department, &c.
24th August 1867.

10. The common Mangoe tree, one of the Terebinthaceæ, would probably yield Turpentine by distillation. The stems of the Ixora alba, Korang Cootchee, Ixoraparviflora, and of the Mooshta Kodi, all of which are very resinous, and are used when green by the native bearers as firesticks, would also yield Resin or Tar by distillation.

11. There is some apparatus in the School of Arts that has been used for making experiments on the manufacture of charcoal; by collecting the products of distillation, it would be easy to test the productive qualities of some of the abovenamed woods, and whether they might not be profitably used for making Turpentine, Resin or Tar.

I will try some experiments with these woods, and will communicate the results to the Chamber of Commerce.

(True Copy.)

(Signed) H. CORNISH,
Acting Secretary.

Submitted for the information of Government in continuation of Board's Proceedings, dated 25th April 1867, No. 2,530.

No. 482. ORDER THEREON, 24th August 1867, No. 1,986.

Miscellaneous.

Ordered to be forwarded for the information of the Government of India, in continuation of the Proceedings of 13th May 1867, with reference to their Circular letter of 30th August 1866, Public Works Department, (Revenue—Forests,) No. 11.

(True Extract.)

(Signed) W. HUDLESTON,
Secretary to Government.

To the Board of Revenue,
" the Conservator of Forests,
" the Agri-Horticultural Society.

Exd. S. T. Augustin.

REVENUE DEPARTMENT,
FORT SAINT GEORGE,
24th August 1867.

No. 1,987.

No. 483.
To

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

SIR,

Miscellaneous.

With reference to your Circular dated 30th August 1866, No. 11 F, and in continuation of my letter dated 13th May 1867, No. 1,070, I am directed to forward to you herewith, for the information of Government of India, copy of the Proceedings of the Board of Revenue, dated 10th August 1867, No. 5,133, giving cover to an interesting Report on the Resinous Products of India from Dr. Hunter, Superintendent of the School of Arts.

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

Exd. S. T. Augustin.

10. The common Mangoe tree, one of the Terebinthaceae, would probably yield Turpentine by distillation. The stems of the Ixora alba Korang Cootchee, Ixoraparviflora, and of the Mooshta Kodi, all of which are very resinous, and are used when green by the Native bearers as *firesticks*, would also yield Resin or Tar by distillation.

11. There is some apparatus in the School of Arts that has been used for making experiments on the manufacture of charcoal; by collecting the *products of distillation*, it would be easy to test the productive qualities of some of the above-named woods, and whether they might not be profitably used for making Turpentine, Resin or Tar.

I will try some experiments with these woods, and will communicate the results to the Chamber of Commerce.

(True Copy.)

(Signed) H. CORNISH,
Acting Secretary.

Submitted for the information of Government in continuation of Board's Proceedings, dated 25th April 1867, No. 2,530.

(True Copies and Extract.)

Sub-Secretary.

To the Secretary to Government, Revenue Department.

Copy to the Chamber of Commerce.

Exd. J. Wright.

Revenue Department.

1867.

No. 2,193.

PROCEEDINGS OF THE BOARD OF REVENUE

Dated 10th August 1867.

No. 5,193.

Submitting for information a letter from the Chamber of Commerce and its enclosure a report from the Superintendent of the School of Industrial Arts on the Resinous products of India.

No. 5,133.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 10th August 1867.

Read the following letter from H. CORNISH, Esq., Acting Secretary to the Chamber of Commerce, to the Secretary to the Board of Revenue, dated Madras, 20th June 1867:—

With reference to the Proceedings of Government, Revenue Department, dated 5th October 1866, I am directed by the Chamber of Commerce to forward, herewith, copy of an interesting report on the Resinous Products of India from Dr. Hunter, Superintendent of the School of Arts, to whom the Chamber referred the above Proceedings.

ENCLOSURE No. 1.

From A. HUNTER, Esq., M. D., Superintendent of the School of Industrial Arts, to the Secretary to the Chamber of Commerce, dated Madras, 17th April 1867.

In reply to your letter of the 13th instant, enclosing Proceedings of Government, Revenue Department, dated 5th October, No. 102, on the subject of the deficient supply of Resin and Tar, I have the honour to inform you that the subject is one of great importance to the further prospects of Southern India, as many of the jungles and hill tracts of this Presidency produce trees that abound in Resin, Turpentine, or similar Gum Resins. I have turned my attention to this subject, and we have been using several of the Oils, Resins and Dammers of this Presidency as substitutes for Turpentine, Resin and Pitch in painting, varnishing and making models of figures and casts of heads and hands and feet of the different tribes.

1. The Vateria Indica yields an abundance of White Dammer, or Dhoop Resin, largely exported from the West Coast to Bombay and to England, for shipping purposes.

2. The Canthium Strictum yields a hard Black Dammer superior to the Resin of Europe and commanding a higher price, as it is useful for varnishes, and as a substitute for oil paint.

3. The Vatica Tumbagaia, abundant in the Paulghat jungles, yields a Green Dammer also [illegible] which may be mixed with drying oils, turpentine or wax, and are suited for preserving wood, varnishing, painting metals, and for modelling, casting, and founding, to which purposes I have frequently applied them.

4. The Shorea robusta, or Saul, which grows abundantly in the Northern Circars, yields the Ral or Dhoona Resin, a good substitute for Pitch, that has been tried in the Marine yards.

5. The Boswellia glabra, which grows in the jungles of the Dekkan and the Eastern Coast, yields a Resin called Koondricum, which makes a good substitute for Pitch or Resin, and can be mixed with linseed or other drying oils as a varnish.

6. The Dipterocarpus augustifolius, or Tiluyagurjum, yields a resinous oil known in commerce as wood oil, and much used as a varnish and substitute for turpentine in dissolving Dammer, Pitch, or Resin.

7. The Dipterocarpus laevis of Coorg, Rangoon, and the Malay peninsula, yields another variety of wood oil used as a varnish for preserving wood and metals.

8. A great source of Resins and Turpentines that is as yet little thought of in Southern India is the class of Coniferous and other trees of the Genera Cupressus, Casuarina and Enclayptus, that have for some years been largely propagated at Madras, Bangalore, and most of our hill stations. These are now thoroughly established and acclimatized. From these Turpentine, Tar, and Pitch could easily be manufactured, and on a large scale if requisite. The new species Pinus maritima, of which a large quantity of seed has lately been procured from Europe, and distributed by the Agri-Horticultural Society, is another fertile source of Tar and Resin.

9. In addition to these, there are other sources of Tar that have been very much neglected in India, but which might be turned to account if desired; (see Illustrated Report on making Tar from chips and shavings of Teakwood, described by Dr. Cleghorn as followed by the Hill Tribes of Upper India with common chatties.)

[illegible]

Revenue Department

21st August 67

To

No. 1987.

The Secretary to the Government of India Public Works Depart.

Sir,

With reference to your Circular dated 30th August 1866, No. 11 F. and in continuation of my letter dated 13th May 1867, No. 1070, I am directed to forward to you herewith for the information of Government of India copy of the Proceedings of the Board of Revenue dated 10th August 1867, No. 5133 giving copy of an interesting report on the Resinous Products

of Indian from Dr Hunter
Superintendent of Police
of Bute.

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Revenue 1867 Despatch
No of Govt of Jon Augt

No 1987

To the Govt of Judicial
Dt 24 August 1867

No 1483.