(No. 51.)

1863.

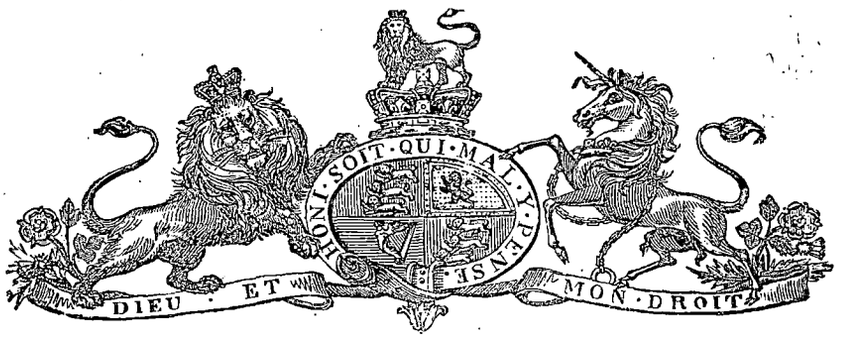
[Second Session.]

TASMANIA.

REPORT FROM THE SELECT COMMITTEE

On the "Bill to amend an Act, intituled *An Act to prohibit Distillation within the Island of Van Diemen's Land;*" together with the Proceedings of the Committee, and Minutes of Evidence.

Brought up by Mr. Balfe, 24 July, and ordered by the House to be printed.



REPORT from the SELECT COMMITTEE *on the Bill to amend an Act, intituled "An Act to prohibit Distillation within the Island of Van Diemen's Land;" together with the Proceedings of the Committee, and Minutes of Evidence.*

THURSDAY, JULY 9, 1863.

Ordered, that the Bill to amend an Act, intituled "An Act to prohibit Distillation within the Island of Van Diemen's Land," be referred to a Select Committee.

TUESDAY, JULY 14, 1863.

Committee nominated of—

MR. BALFE.	MR. MURRAY.
DR. SHARLAND.	MR. PERKINS.
MR. ROSE.	MR. HAGGITT.

REPORT.

YOUR Committee have taken the annexed Evidence on the subject of Distillation of the indigenous Timber of the Colony; and have arrived at the conclusion that various products of very considerable Commercial value, and in good demand, are obtainable by that process.

Your Committee are of opinion, from the Evidence adduced, that it is probable, in the event of the Bill referred to them passing into Law, that at least one large Establishment will be immediately formed for the purpose of carrying on the business of Wood Distillation.

The profits of such an undertaking appear by the Evidence to be very large; as, from a Capital of between £3000 and £4000 so employed, the experiments which have been made justify the expectation of an annual profit of from £7000 to £8000.

It appears also by the Evidence that the gross products of a Manufactory of that nature, formed with the Capital above mentioned, would be worth about £10,000 a year, of which nearly £8000 would be in the shape of Exports of ready sale and ascertained value in the English market; and that the manufacture of other articles of Export, likely to be of no little value and importance, would probably result from the establishment of that now in question.

A considerable number of hands, and a large Capital, might be profitably employed on such establishments; and the process of clearing heavy timbered land would be rendered profitable by the proposed mode of disposing of the wood.

In the event of the profits realised by the first Manufactory established reaching anything like the per-centage on the outlay stated above, and its success becoming publicly known, it seems reasonable to suppose that many others of the same nature would be formed; and that the result would be the establishment of an extensive and profitable manufacture for which this Colony is peculiarly adapted, and which would yield several articles of Export to a very large amount.

It seems that the carrying on of this kind of manufacture is at present prevented by the action of the Law prohibiting Distillation.

It does not appear probable to your Committee that the repealing the prohibition against the use of Stills, under the conditions and restrictions provided by the Bill, would facilitate or screen the practice of Illicit Distillation: they have, however, suggested two amendments in the Bill,—one to define the minimum capacity of the Stills to be used, and the other to authorise visits of inspection by the Police or other persons authorised by the Collector of Customs.

Your Committee present the Bill with such amendments as the result of their deliberations.

J. D. BALFE, *Chairman.*

Committee Room, 24th July, 1863.

PROCEEDINGS OF THE COMMITTEE.

WEDNESDAY, JULY 15, 1863.

Members present—Mr. Haggitt, Mr. Rose, Dr. Sharland.

The Committee met at 11·20, and appointed Mr. Balfe to be Chairman.

Adjourned at 12 to Tuesday, 21st July, at Eleven.

TUESDAY, JULY 21, 1863.

Members present—Mr. Balfe, Mr. Haggitt, Mr. Rose, Dr. Sharland, Mr. Murray.

The Committee met at 11 A.M.

Mr. Benjamin O'Neil Wilson was examined.

Adjourned at 12·10 to to-morrow at Eleven.

WEDNESDAY, JULY 22, 1863.

Members present—Mr. Balfe, Mr. Haggitt, Mr. Perkins, Dr. Sharland.

The Committee met at 11 A.M.

Mr. W. R. Falconer was examined.

Ordered, that a Draft Report be prepared by Mr. Haggitt, and submitted for approval at the next meeting of the Committee.

Adjourned at 11·40 to Friday, 24 July, at Eleven.

FRIDAY, JULY 24, 1863.

Members present—Mr. Haggitt, Mr. Rose, Dr. Sharland, Mr. Murray.

The Committee met at 11 A.M.

Draft of proposed Report read and agreed to.

Ordered to report.

EXPENSES OF WITNESSES.

Name.	*Profession.*	*From whence summoned.*	*Number of Days absent from Home.*	*Expenses allowed.*
Benjamin O'Neil Wilson, *M. A.*	Gentleman.	City of Hobart.	—	—
William Rose Falconer, *J. P.*	Director of Public Works, and Civil Engineer.	Ditto.	—	—

MINUTES OF EVIDENCE.

21 JULY, 1863.

B. O'NEIL WILSON, *Esq., called in and examined.*

In reply to questions from Mr. Haggitt:—

I am a Master of Arts of Trinity College, Dublin.

Chemistry was included in the course of my studies at college.

I have, as far as I could, under the restrictions in the Colony, paid attention to Chemical experiments.

I have turned my attention to the dry distillation of the woods of the Colony.

From a ton of Stringy-bark or Peppermint wood the following products can be obtained:—

QUALITATIVELY—Pyroligneous Acid; Tar; Kreosote; Eupione; Pyroxylic Spirit, or Wood Naphtha; and Charcoal.

QUANTITATIVELY—Eight hundred to a thousand pounds weight of rough Acid; 100 to 140 pounds of Tar; 7 to 10 pints of Naphtha; 2 to 3 gallons of Kreosote; 500 to 600 pounds of Charcoal.

Crude pyroligneous acid to be rendered fit for export—that is, to make it merchantable in England—must be distilled to separate the soluble tar and the pyroxylic spirit, mixed with lime, and evaporated to crystallisation. This forms pyrolignite or acetate of lime, which is dried and put in casks for exportation.

The pyroligneous acid would produce from one ton of Stringy Bark or Peppermint from 80 to 120 pounds of Acetate of Lime. Muspratt, the great consulting chemist of Liverpool, says 140 pounds.

The average value of Acetate of Lime is from £8 to £10 a ton. I produce a letter from a Chemical Broker at Manchester, stating that the best qualities will produce £15 a ton. [Letter put in.]

"*7, Norfolk-street, Manchester, 27th January*, 1863.

DEAR SIR,

THE best prices I can get for the articles you mentioned are—Acetate of Lime £8 to £10 per ton; Acetate of Soda, not made here; crude Acetic Acid 2*d.* per lb.; Iron Liquor 6*d.* per gallon.

The best qualities of Acetate of Lime run £15 per ton.

Hoping these will be satisfactory to you,

I remain,
Dear Sir,
Yours truly,

H. F. LAJOUCHERE, *Esq.* R. E. BIBBY."

Kreosote is worth 2*s.* a gallon in the English market.

Pyroxylic spirit is worth 4*s.* 6*d.* a gallon in the English market.

Charcoal, if it were introduced as fuel in the City at £1 per ton, could not be made in quantities sufficient to supply the demand. There is no demand at present prices, for it except in foundries and smitheries.

In failure of finding a market for the charcoal in its rough state, it could be turned into Patent Fuel.

Of this there are three kinds in England which sells, the best at 30*s.* a ton; other samples at from 19*s.* to 27*s.* a ton.

There is not the least doubt of patent fuel finding a ready sale in Melbourne or Sydney for steam ships or steam engines. In point of heating qualities it is 20 per cent. better than the best coal.

Patent fuel made from charcoal would be much better than the English patent fuel, which is made from coal.

In France it costs 2*s.* 3*d.* a ton to make the Patent Fuel, where labour is cheap. I don't know the cost in England where charcoal is too valuable for the purpose.

The value of the gross proceeds of a ton of Stringy Bark or Peppermint distilled would be 22*s.* 6*d.*, taking a low or medium produce of quantity.

I have tried experiments with several of the indigenous trees of the Colony,—Peppermint, Stringy Bark, Gum, and Swamp Gum, in order to obtain the liquid products from them. The facts I have stated in evidence to-day are the result of those experiments.

We should require iron or clay retorts for distilling pyroligneous acid in the first instance; a still to separate the tar and spirit from the acid; a still to rectify wood naphtha; and one to separate kreosote and eupione from the tar.

Say that 30 tons a day of wood were distilled, everything complete in the way of plant could be obtained for about £1700. About 20 men would be required, whose wages would vary from £50 to £80 a year according to their ability or accountability.

The work would be night and day, and the men must be trustworthy.

I put down about £1200 a year for wages. This does not include the salary of a Manager, but less than 20 men could do the work. £1500 a year would include the whole expense if the Manager were allowed a share in the profits.

The £1700 includes buildings as well as plant.

To be worked to the best advantage it would require to be worked on Sundays as well as week-days; on Sundays 2 or 3 half-hours work only would be required to keep the furnaces alight.

The plant would last for a number of years if proper care were taken to secure the Stills. I put down £954 for freight, and £500 for commission on the products exported. The gross receipts would be £10,000 a year. I calculate a clear profit of £7471 a year.

The law prohibiting Distillation prevents such an establishment being formed in this Colony at the present time.

It would certainly not be possible to use any of the Stills I have mentioned for the purpose of making spirits fit for drinking. I produce a small quantity of the rough pyroligneous acid as it comes from the wood. This requires to be distilled to take the tar out of it. I have made the acetate of lime, but have not got any here.

The Still, previously to using it, might be used to distil a drinkable spirit, but afterwards it would be impossible.

There is no likelihood of the demand for acetic acid falling off, or of the market being glutted.

It is used as dyes for calico, called red and black liquor, besides being largely used for vinegar when purified. In fact it enters into a great number of manufactures in England. The beautiful blue dyes are all acetates. Kreosote is used instead of the kyanizing process with wood.

Both kreosote and pyrolignite of iron are used as preservers of wood in the Queen's Dock-yards.

Railway Sleepers are worth 5*s*. each in England. I don't know the value in India.

The cost of freight of sleepers to England would be 30*s*. a ton. The number of sleepers to the ton would be according to whether they were for broad or narrow guage, for light or heavy sleepers; there would be from 12 to 18 sleepers to a ton; which would give an average of 2*s*. each for freight.

I don't know how many sleepers a saw-mill would turn out. There would be no difficulty in getting rid of a large quantity in Ceylon and in India, where the field is illimitable, and in England where they are at present working up poor fir timber with kreosote.

Pyrolignite of iron can be made at 4*d*. a gallon profitably.

The wood is usually impregnated with kreosote. 50 sleepers could be turned out every two hours. The kreosote preserves timber from weather, insects, and the white ant.

Pyrolignite of iron makes the timber so hard as to make it difficult to work it.

With pyrolignite of iron the softest timber is better than the hardwood, as it takes up more of the preparation.

By Mr. Balfe.—If Distillation were allowed I have no doubt that private capital would be invested in wood distilling. I know it would be. It would not affect the Revenue if proper notice were given to the Customs with authority to see to the proper application of the Stills. Once used they could not be used for distilling drinkable spirit, without great expense for purifying. If spirits were passed through the pyroxylic Still it would not be spirit at all, but something else—*methylated* spirit.

By Mr. Murray.—The spirit could not be got without a worm. The Gas Company uses worms in making Gas. In the Gas Company all they want is Gas, which we don't want. I could not use the same machinery as is used by Gas Companies,—nor like a Spirit Still, but yet it must be a Still.

By Dr. Sharland.—In making patent fuel, charcoal is first ground and then mixed with tar, and then made into cakes.

If the apparatus were used for wood distillation it could be detected at once by the flavour. No further supervision would be necessary than the Customs, who should have power to see to its use.

Acetic acid is used in thousands of tons.

One manufactory in England produces 10, 12, to 15,000 gallons weekly; another evaporated in three weeks 22,000 gallons, and made 248 cwt. of acetate of lime, grey and brown; another produced 225,000 gallons.

Large works are carried on in Gloucestershire, Northumberland, Lancashire, Monmouth, and one in Glamorganshire, Glasgow, Liverpool, Deptford, Stroud, in fact wherever they can get wood.

In France one establishment uses 125 tons of wood per month.

In England the wood is 18*s.* to 30*s.* a ton; here it costs nothing.

By Mr. Murray.—If the Police found a Still the owner could say that he was only using it for wood distilling. If he used it for spirit distilling, punish him. It could easily be detected, and it would be the business of the Government to detect it.

The Colonial woods yield a larger and stronger amount of distilled matter than the English woods.

The She-oak might yield a larger quantity than other woods less hard, but it is valuable for timber and firewood.

From the leaves of the Eucalypti oils can be distilled. There was some at the Great Exhibition,—it is used as a solvent for resin and varnishes. Some perfumers in England got hold of it as a foundation for their perfumes; an order was sent out to Victoria for a large quantity, and there is now an establishment making it there.

The oil is equal to cajeput, which is an expensive oil.

Mr. Wilson withdrew.

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22 July, 1863.

W. R. FALCONER, *Esq., Director of Public Works, called in and examined.*

I am acquainted with manufactories. I have not paid particular attention to the distillation of woods in this Colony.

I cannot say what products can be obtained from the Colonial woods. From English oak and beech, snperior woods, 5 to 6 ounces of pyroligneous acid can be obtained from a pound of wood; from inferior woods, 2 to 3 ounces from a pound.

Pyroligneous acid is imported into England in a partly purified state from America, and it undergoes a second process in England.

I have seen the acetate of lime. A friend of mine, a Mr. Turnbull, sent his son to the United States; took land on the line of the Ohio Railway, and erected a saw-mill and manufactory for distilling from wood. He cut the large oak trees, and, after sending the planks to the ship-builders, he distilled acid from the branches and refuse outside timber. The acid was sent to Manchester and Glasgow, packed in casks made on his own establishment, and the charcoal was sent to New York. The affair turned out very profitable; and the land, after being cleared of the timber, fetched a higher price in the market.

I should think there would be a good market for charcoal here or in the adjoining Colonies, if it could be produced cheap. Wood, when the acid is distilled from it, would produce 50 per cent. of charcoal.

Pyroligneous acid produces naphtha by distillation, which is a valuable product. Kreosote is also obtainable, but is not taken much notice of. I don't know the value of these articles in the English market.

I have never seen patent fuel made from charcoal. I believe it is so made in France. In England the demand for charcoal is so great as to render the article too valuable to be used for patent fuel. The Welsh coal, which is an anthracite, cuts out the patent fuel.

I suppose the prices of all these articles can be found in the price lists in newspapers or merchants' offices.

Stills are requisite to purify the liquid. After a still has been used for wood distillation it could not be used for spirit distillation without considerable trouble in cleaning.

In large establishments where pyroligneous acid is made, and a large number of men are employed, stills could not be used for spirit distillation without fear of detection. It would be difficult in a small establishment to detect such malpractices. Stills should be enforced of a certain size.

I believe asafœtida is put into spirits for the purpose of destroying their drinkable qualities.

Acetic acid is in great demand for calico printing. I believe it is one of the principal articles in use in calico printing.

There is no fear of an establishment here glutting the English market.

Timber is preserved in England by injecting it with pyrolignite of iron.

If railway sleepers were treated in this way it would preserve them.

In India the sleepers are liable to split if exposed to the heat of the sun,—and if the ballast be filled up to the level, then the dry rot sets in.

The price of Railway sleepers in Melbourne is so low, 2*s.* 3*d.* each, 9 feet long by 10 inch and 5-inch square, that people here will not ship them at that price.

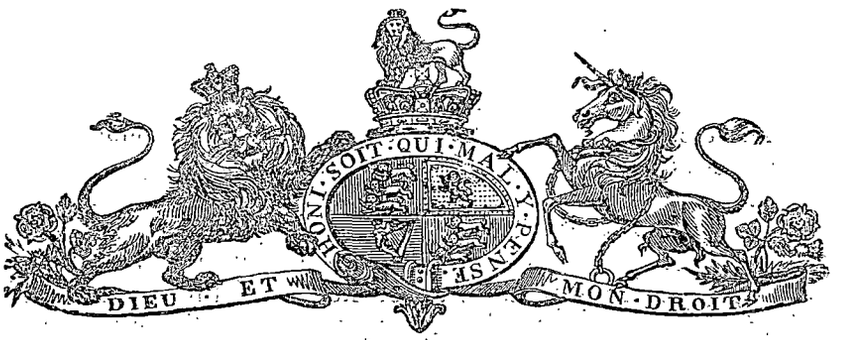
In India, by the last accounts, the price of Railway sleepers was very low.

By Dr. Sharland.—I have been in Canada and the United States. The only wood distillery I know of is that of Mr. Turnbull, in the United States. None that I know of in Canada.

By Chairman.—When the stills are put up in Districts thickly timbered, and where no grain is grown, the knowledge that much sugar was sent to that District would raise suspicion.

Draft. (*June*, 1863.)

TASMANIA.



1863.

No. 23.

A BILL to amend an Act, intituled *An Act to prohibit Distillation within the Island of* Van Diemen's Land.

WHEREAS an Act was passed in this Island in the Second year of the Reign of Her present Majesty, intituled *An Act to prohibit Distillation within the Island of* Van Diemen's Land, whereby every person in this Island or its Dependencies is prohibited from having or keeping, under any pretence, or using, any Still whatever, and whereby any person in whose possession any Still shall be found is made liable to a penalty of not less than One hundred Pounds nor more than Five hundred Pounds: And whereas certain undertakings for obtaining, by means of Distillation from the indigenous vegetable productions of this Island, several liquid products used extensively in manufactures (not being low wines, feints, or spirits), are prevented by the operation of the hereinbefore recited Act: And whereas it is expedient to remove the restrictions imposed by the hereinbefore recited Act on Colonial enterprise, in order to encourage the establishment of new manufactures, to afford profitable employment for labour and capital, and to increase the exports of the Colony: Be it therefore enacted by His Excellency the Governor of *Tasmania*, by and with the advice and consent of the Legislative Council and House of Assembly, in Parliament assembled, that nothing contained in the said hereinbefore recited Act shall render, or be taken or construed to render, liable to any penalty any person or

body corporate who shall have or keep, or use, any Still or Stills, of not less capacity than 150 gallons, for the purpose of obtaining by means thereof, from any of the indigenous vegetable productions of this Island, any liquid products, not being low wines, feints, or spirits: Provided always that, before any such person or body corporate shall keep or use any such Still or Stills, a memorandum or entry thereof in writing shall be delivered by such person or body corporate, or his or its authorised agent, to the Collector of Customs of the Port nearest to which such Still or Stills is or are intended to be erected, specifying the purpose or respective purposes for which such Still or Stills is or are intended to be used, and the place or respective places where the same is or are intended to be erected or kept: Provided also, that nothing herein contained shall relieve, or be taken or construed to relieve, any person from the penalty imposed by the said hereinbefore recited Act if any Still, so entered by him, should be used for the purpose of making low wines, feints, or spirits: Provided also, that it shall and may be lawful for any Inspector or Superintendent of Police, or any District Constable, or for any other person thereto authorised in writing by any such Collector of Customs, at any time to enter into and upon any place, whereof notice shall have been given as aforesaid, for the purpose of viewing and inspecting the same, and the Still or Stills thereon erected.

JAMES BARNARD,
GOVERNMENT PRINTER, TASMANIA.