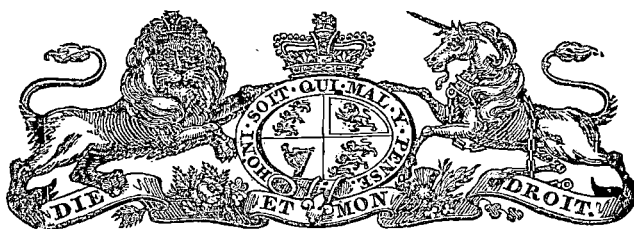


(No. 50.)



1897.

SESSION II.

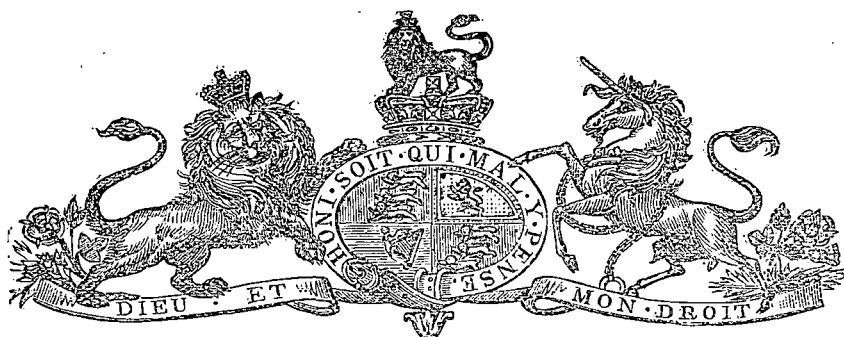
PARLIAMENT OF TASMANIA.

AGENCY-GENERAL IN LONDON:

INTERIM REPORT OF THE SELECT COMMITTEE, WITH
MINUTES OF PROCEEDINGS AND EVIDENCE.

Brought up by Mr. McWilliams, October 19, 1897, and ordered by the House of
Assembly to be printed.

Cost of printing—£42 15s.



SELECT COMMITTEE appointed, on the 13th day of August, 1897, to inquire into and report upon the advisability of converting the Agency-General in London into a General Agency, with the object of rendering that office of more practical utility to the Colony, especially in the direction of assisting in opening British and Foreign markets to the surplus products of Tasmania; the inquiry to embrace the present method of Fruit Carriage to London, and any improvement that can be made therein.

MEMBERS OF THE COMMITTEE.

Mr. Treasurer.
Mr. Burke.
Mr. Evans.
Mr. Bird.
Mr. Bradley.

Mr. Woolnough.
Mr. Hall.
Mr. Fowler.
Mr. Ronald Smith.
Mr. McWilliams. (Mover.)

DAYS OF MEETING.

Wednesday, August 18; Friday, August 20; Wednesday, September 1; Thursday, September 2; Wednesday, September 8; Tuesday, October 12; Wednesday, October 13; Thursday, October 14; Friday, October 15.

WITNESSES EXAMINED.

Mr. J. M. Jacobs; Mr. F. W. J. Moore; Mr. H. Jones; Mr. Alfred Wright; Mr. F. F. Butler;
Mr. James Gregory; Mr. W. D. Peacock.

REPORT.

IN view of the urgency of the Fruit export trade, your Committee decided to deal first with that question, in order that much needed assistance might be given during the approaching season. Consequently your Committee now bring up an Interim Report, with the view of further dealing (with the leave of the House) with the other phases of the subjects submitted to them in future.

2. After hearing evidence of experts, your Committee are of opinion that unless some assistance be given to the producers with the object of securing better means of carriage, the export trade in fruit from Tasmania to England is in great danger, and will probably soon cease to maintain important dimensions.

3. From the evidence adduced we are convinced that the existing method of "cool storage" obtained by the freezing process results most disastrously, and the testimony is universally in favour of a system of ventilation by means of artificially supplied "cool air."

4. Your Committee therefore recommend that a trial shipment, or that shipments of apples under the "ventilation" system, be made during the coming season, the trial to be carried out under the control of the Government. Your Committee further recommend that the Government should, for the coming season, enter into a contract with one of the steamship companies trading between England and Australia for the carriage of fruit, the Government guaranteeing the cost of freight, under such conditions as may be deemed necessary.

5. The evidence unanimously shows that, based on the experience of the last ten years, there would be practically no risk of loss to the Government by such guarantee, whilst such guarantee would enable the producers to govern the sale of their fruit and make their own trade arrangements.

6. As the results of the last season's shipments were so disastrous, your Committee would respectfully urge the necessity of steps being immediately taken in the direction recommended.

7. The other subjects referred to your Committee will, by leave of the House, be dealt with at a later period during the session.

W. J. McWILLIAMS, *Chairman*.

*Committee Room, House of Assembly,
October 15, 1897.*

MINUTES OF PROCEEDINGS.

WEDNESDAY, AUGUST 18, 1897.

The Committee met at 3 o'clock.

Members present.—Mr. Burke, Mr. Fowler, Mr. Bradley, Mr. Hall, Mr. Ronald Smith, and Mr. McWilliams.

The Clerk read the Order of the House appointing the Committee.

Mr. McWilliams was appointed Chairman.

Resolved, That the Clerk be instructed to write to the Ministers of Agriculture in the Australian Colonies and New Zealand, requesting them to furnish this Committee with all Reports within the last two years dealing with the encouragement of products of the Colonies, and steps taken to obtain markets for surplus produce in Great Britain and elsewhere; also the means adopted to provide education to farmers and other producers; also the latest arrangements in connection with the Agent-General and Commercial Agency.

The Committee then entered upon the consideration of the subjects to be inquired into.

The Committee adjourned till 2:30 on Friday next.

FRIDAY, AUGUST 20, 1897.

The Committee met at 2:30 o'clock.

Members present.—Mr. McWilliams (Chairman), Mr. Evans, Mr. Smith, Mr. Woolnough, Mr. Burke, Mr. Hall.

Resolved, That the questions drafted by Members be forwarded to the Chairman to compile. The revised list of questions to be printed and forwarded to Members for circulation.

Captain Evans laid upon the Table correspondence and pamphlets he had procured from Melbourne relating to Government Assistance to Producers.

Resolved, That separate papers be prepared dealing with each industry, and that miscellaneous questions of common interest be also prepared.

Ordered, That all suggested questions be in hand of Chairman by 28th instant.

The Committee adjourned until next Wednesday fortnight.

WEDNESDAY, SEPTEMBER 1, 1897.

The Committee met at half-past 10 o'clock.

Members present.—Mr. McWilliams (Chairman), Mr. Woolnough, Mr. Evans, and Mr. Bradley.

The Minutes of last Meeting were read and confirmed.

The Chairman read a letter from Mr. John Gunning, editor of the *Daily Telegraph*.

Resolved, That the letter be acknowledged, with thanks. (Mr. Evans.)

Mr. J. M. Jacobs was called in and examined.

The Committee adjourned at 12:45.

The Committee met again at a quarter past two o'clock.

And the Chairman being temporarily absent;

Ordered, That Mr. Woolnough take the Chair during the Chairman's absence this day.

V

Mr. *McWilliams* resumed the Chair at 3 o'clock.
 Mr. *Jacobs* was further examined.
 Mr. *Jacobs* withdrew.
 Mr. F. W. J. *Moore* was called in and examined.
 Mr. *Moore* withdrew.
Ordered, That Mr. *Moore* be summoned to give further evidence at 2:30 o'clock to-morrow afternoon.
 The Committee adjourned till half-past two o'clock to-morrow.

THURSDAY, SEPTEMBER 2, 1897.

The Committee met at half-past 2 o'clock.
Members present.—Mr. *McWilliams* (Chairman), Mr. *Bradley*, Mr. *Evans*, and Mr. *Bird*.
 The Minutes of last Meeting were read and confirmed.
 Mr. F. W. J. *Moore* was recalled and further examined.
 And the Chairman being called away on urgent private business;
Ordered, That Mr. *Bird* take the Chair during the rest of the afternoon.
 Mr. *Moore* withdrew.
Ordered, That Mr. F. W. J. *Moore* be summoned to give further evidence at 10:30 on Wednesday, September 8.
Ordered, That Mr. H. *Jones* be summoned to give evidence at 11:30, and Mr. W. D. *Peacock* at 2:30 o'clock, on Wednesday, September 8.
 The Committee adjourned till Wednesday next, the 8th instant, at 10:30 o'clock.

WEDNESDAY, SEPTEMBER 8, 1897.

The Committee met at half-past 10 o'clock.
Members present.—Mr. *McWilliams* (Chairman), Mr. *Evans*, Mr. *Bradley*, and Mr. *Woolnough*.
 The Minutes of last Meeting were read and confirmed.
 Mr. F. W. J. *Moore* was recalled and further examined.
 Mr. *Moore* withdrew.
 Mr. H. *Jones* was called in and examined.
 Mr. *Jones* withdrew.
Ordered, That Mr. W. D. *Peacock* be summoned to give evidence at 2:30 P.M. to-morrow.
 At 1:30 the Committee adjourned till 2:30 to-morrow.

TUESDAY, OCTOBER 12, 1897.

The Committee met at 11 o'clock.
Members present.—Mr. *Bradley*, Mr. *Evans*, and Mr. *Woolnough*.
 In the absence of the Chairman, Mr. *Evans* was appointed Acting Chairman.
 The Minutes of the last Meeting were read and confirmed.
 Mr. *Bird* took his seat.
 Mr. *Alfred Wright* was called in and examined.
 Mr. *Wright* withdrew.
 At 12:50 P.M. the Committee adjourned till 2:15 P.M.
 The Committee met at 2:15 o'clock.
Present.—Mr. *Evans* (Acting Chairman), Mr. *Bird*, Mr. *Bradley*, and Mr. *Woolnough*.
 Mr. *Wright* exhibited two models.
 Mr. *Wright* withdrew.
 Mr. F. F. *Butler* was called in and examined.
 Mr. *Butler* withdrew.
 Mr. *James Gregory* was called in and examined.
 Mr. *Gregory* withdrew.
Resolved, That Mr. W. D. *Peacock* be summoned to attend at 2:30 o'clock to-morrow, to give evidence.
 The Committee adjourned till 2:30 o'clock to-morrow.

WEDNESDAY, OCTOBER 13, 1897.

The Committee met at half-past 2 o'clock.
Members present.—Mr. *Bird*, Mr. *Bradley*, Mr. *Evans*, and Mr. *Ronald Smith*.
 The Minutes of last Meeting were read and confirmed.
 In the absence of the Chairman, Mr. *Evans* was appointed Acting-Chairman.

An apology was read from Mr. *McWilliams* (Chairman) for his absence on urgent private business.

Mr. *Evans* laid on the Table a letter from Messrs. *Hudson Bros.*, of Sydney, offering to fit up ship for experimental shipment.

Mr. *W. D. Peacock* was called and examined.

Mr. *McWilliams* took his seat.

Mr. *Woollnough* took his seat.

Mr. *Peacock* exhibited some diagrams to the Committee.

Mr. *Peacock* withdrew.

Mr. *McWilliams* resumed the Chair.

The Committee deliberated.

The Committee adjourned till 11 o'clock to-morrow.

THURSDAY, OCTOBER 14, 1897.

The Committee met at 11 o'clock.

Members present.—Mr. *Evans*, Mr. *Bradley*, Mr. *Hall*, Mr. *Fowler*, and Mr. *Ronald Smith*.

In the absence of the Chairman, Mr. *Evans* was appointed Acting-Chairman.

The Committee deliberated.

Resolved, That the Chairman, Mr. *Evans*, and Mr. *Fowler*, do prepare a Progress Report, and bring up the same for consideration at 12-15 p.m. to-morrow.

The Committee adjourned till 12-15 o'clock to-morrow.

FRIDAY, OCTOBER 15, 1897.

The Committee met at 12-15 o'clock.

Members present.—Mr. *McWilliams* (Chairman), Mr. *Bradley*, Mr. *Hall*, Mr. *Ronald Smith*, Mr. *Evans*, Mr. *Woollnough*, and Mr. *Fowler*.

Draft Progress Report submitted by the Chairman and read by the Clerk as follows:—

In view of the urgency of the Fruit export trade, your Committee decided to deal first with that question, in order that much needed assistance might be given during the approaching season. Consequently your Committee now bring up an Interim Report, with the view of further dealing (with the leave of the House) with the other phases of the subjects submitted to them in future.

2. After hearing evidence of experts, your Committee are of opinion that unless some assistance be given to the producers with the object of securing better means of carriage, the export trade in fruit from Tasmania to England is in great danger, and will probably soon cease to maintain important dimensions.

3. From the evidence adduced we are convinced that the existing method of "cool storage" obtained by the freezing process results most disastrously, and the testimony is universally in favour of a system of ventilation by means of artificially supplied "cool air."

4. Your Committee therefore recommend that a trial shipment, or that shipments of apples under the "ventilation" system, be made during the coming season, the trial to be carried out under the control of the Government. Your Committee further recommend that the Government should, for the coming season, enter into a contract with one of the steamship companies trading between England and Australia for the carriage of fruit, the Government guaranteeing cost of freight, under such conditions as may be deemed necessary.

5. The evidence unanimously shows that, based on the experience of the last ten years, there would be practically no risk of loss to the Government by such guarantee, whilst such guarantee would enable the producers to govern the sale of their fruit and make their own trade arrangements.

6. As the results of the last season's shipments were so disastrous, your Committee would respectfully urge the necessity of steps being immediately taken in the direction recommended.

7. The other subjects referred to your Committee will, by leave of the House, be dealt with at a later period during the session.

Paragraphs 1 to 4 read 2^o, and agreed to.

Paragraph 5, read 2^o.

And the Question being put— That the paragraph, as read, stand part of the Report; (*Mr. Hall*.) Committee divided.

AYES 5.

Mr. *Bradley*.

Mr. *Evans*.

Mr. *Fowler*.

Mr. *Hall*.

Mr. *Smith*.

NOES 1.

Mr. *Woollnough*.

So it was resolved in the Affirmative.

Paragraphs 6 and 7, read 2^o, and agreed to.

The Committee adjourned *sine die*.

EVIDENCE.

WEDNESDAY, 1ST SEPTEMBER, 1897.

MR. JOHN MYLLES JACOBS, *called and examined.*

1. *By Mr. McWilliams (Chairman).*—What is your name? John Mylles Jacobs.
2. You know the subject of this enquiry? Yes. From what I learned in the House of Assembly during the debate on the subject I grasped what is the intention of the Committee, and will be only too pleased to forward the object in view, which is a very, very good one.
3. Have you had experience in the fruit trade? I was born in Covent Garden, and brought up in Covent Garden. Some years later I went to France and had experience of the fruit trade there. Then I went to Covent Garden again, and was there until I was appointed, out of a number of others, to represent Pankhurst, of Covent Garden, in these colonies. That is what brought me here.
4. Have you had practical experience as to the mode of buying imported apples sent into England, say in London? Tasmanian apples do you mean, or any others?
5. Tasmanian apples, certainly? Yes, I have had a long experience.
6. In connection with other wares you have had to sell you have experience of apples? Yes, I have handled some thousands on thousands of cases and barrels, and I know an apple when I see one.
7. Well, have you had experience in the London market with Tasmanian apples? Only during one short season in 1889, and then I only saw a very few Tasmanian apples. I left for Tasmania in 1889. Until then I was unacquainted with them, although I had seen them in the market. In 1892 I went home with a cargo in the s.s. *Port Victor*, and saw them landed and sold. I had the handling of them, in fact.
8. Will you explain the system in operation of buying Tasmanian apples in London? The present system? It is sale by auction to the retail fruit purchasers. There are about seven auctioneers who deal in this trade at Covent Garden, or in the foreign fruit trade. There are at least five auctioneers who sell Tasmanian apples, and they take their auction boxes at Covent Garden about 10 in the morning, the buyers being present. Of course these auctioneers have a number of other fruits for sale besides Tasmanian apples; and if they would, they can't always deal with them first, unless by special sale. They have got to be particular in dealing with the several lots, because the country buyers are in Covent Garden and have to meet the trains going south or north. There is not too much time to get the stuff from the ship's hold and to get it sorted, if there is a good demand; and, as soon as sorted, each auctioneer takes his stock. They get their own men to do the work. In some cases samples are taken to Covent Garden and the fruit at once sold by sample. It takes some time to get the stuff to the market from the docks, the distance being about eight miles. They get the fruit from the docks to Fenchurch-street station, and then it is carted to the market. Owing to this they very often take samples from the ships to the market and sell by sample. It often happens that sample cases are on the top and in good condition, and they sell by that sample on arrival; then, when the cargo is put out as they get below, the fruit is found in a bad condition and the sale is nullified. You often hear of cases where the fruit is returned after sale: that is caused by the fruit not being up to the sample by which it was sold.
9. Do they sell fruit always by sample? Yes, always by sample.
10. In your opinion have the shipments of fruit to England resulted satisfactorily? Far from it. It is a broad question. Many growers have never shipped to England for years on their own account. Many growers have sold their fruit to the brokers and local speculators at an average price of 3s. 6d. per case, f.o.b. Others have preferred to accept guaranteed advances from London brokers. They have generally received 2s. 6d. per case over and above the cost of freight, which had to be guaranteed. Where a number of growers have sent their fruit to Sydney, they have got from 4s. to 4s. 6d. per case returned, and it was better for them than for those who had shipped to England on the 2s. 6d. advance.
11. From your personal experience, do you believe that shipments of Tasmanian apples to England have proved satisfactory? Not by any means; if one season was a success the next has been a failure.
12. Can you state the cause of the failure? The cause of the trouble would be attributable, in many instances, to bad carriage. I presume much of the fruit leaving here, in fact in most instances, would be up to standard. When it left it would be so. I know that a great number of those who export fruit to England are careful men, who take an interest in it. I had a consignment of 6000 or 7000 cases of really good fruit. These men had shipped before, and made really good prices. They shipped last year, and disaster followed disaster. This shows, practically, that the cause of failure is bad carriage on the journey home.
13. Was that not on account of bad packing? Not from what I saw on the wharf. I saw the samples when shipped, and I am satisfied that the fruit was as good as that shipped in any previous season.
14. Then, how do you account for the failure? I believe it to be attributable to the cool chamber. When the matter was known in Hobart, it was stated the brokers had taken advantage of parcels of fruit being in bad condition, and the returns showed that the fruit was sold in bad condition throughout; and it was said they had benefited by that. It went to a firm in Covent Garden Market, and it was proved they had not tried anything of the kind; and they asserted the fruit was landed in very bad order. This firm interviewed the Agent-General in London, and Messrs. Garcia, Jacobs, & Co. gave him ocular demonstration that the fruit had not been used in the manner asserted in Hobart, but was positively landed in bad order.
15. But why in the cool chamber? Do you think it is a failure in point of the means—but I will not ask you a leading question. How do you account for the failure? I think the system is altogether wrong. I don't think the cool chamber is now wanted. We want a more satisfactory system of carriage of fruit to

London. We want some other system. We have had some nine or ten years' experience of the cool chamber system, and now the fruit is landed in a worse condition than when we started.

16. Well, how do they fail in the present system? Oh, I am not an Engineer, and don't profess to know about cool chambers or their working.

17. Is it because the fruit is frozen when landed? The fruit is reported either frozen or baked. I don't think that I know really whether it is baked or frozen. If fruit is frozen or baked it will have a baked appearance. If fruit is allowed to parboil it will have a brown baked appearance. I can't say whether it may be baked or frozen, but I think, perhaps, it is a little of both. I think the stowing of it on board the ships is very bad.

18. In what way? By bringing it too near the blowhole.

19. Have you ever seen the fruit stowed in the vessels? As far as I have been allowed. We are generally forbidden to go down. Others besides myself have been refused; in fact, as far as I can see, it is a sort of sacred edifice down there in the cool chamber, and they will not allow me to go down and see it.

20. Even when it is your own fruit that is being shipped? Yes, even when it is my own. I have seen Mr. Shoobridge go down, but he is a not an engineer, and I did not attach much importance to it.

21. Do you think that sufficient space is allowed between the cases? No. I made a suggestion once that there should be two small battens attached to each case. My object was that where two cases came together there would be room for air to circulate.

22. You know that battens are put between the tiers of cases in the mail company's boats—they offered to do it? Yes, that is a batten between stack and stack. That is not my system; I want the system of nailing on sides of cases two eighth-of-an-inch battens.

23. The French system of nailing is the best? Exactly, the same system as the French use on their pear-boxes. That is the superior system. You would possibly lose a lot in measurement, and I suppose the companies must charge more for freight, but I would not take that so much into consideration so long as we could get the fruit home in good condition.

24. You mean that the difference in the increased cost of freight, I suppose, would be more than counterbalanced by getting the fruit landed in good condition? Undoubtedly. The broker or the grower would not mind paying even more if they could get a proper system under which the fruit might be landed in good condition.

25. In your experience, Mr. Jacobs, what is the condition in which the bulk of the Tasmanian apples leave Hobart? I will speak generally on the whole question. The fruit, as a rule, leaves in very good condition. As to shipment, the mail companies enter into contracts with Hobart shipping agents to have their fruit sent to England in the cool chambers during the season, contracting for so many cases per steamer *pro rata* according to what the ship will carry. Should they fail to supply that quantity of fruit, the shipping agents are bound to refund on dead freight at the rate of 4s. per case, the amount of the freight, supposing it is not taken up and the space filled with cases of fruit.

26. Practically, the contracting agent has to guarantee a certain amount of freight whether filled up or not? Yes, whether the season is good or the trees have been destroyed, if a man has taken the cool space the season does not weigh in the question. When a man in Hobart has made an arrangement for so many cases per steamer, there is an absolute necessity for the fruit to come forward. The result is that to fill the space fruit is sent forward with the pips perfectly white, which means that when it reaches England it will be in a shrivelled condition, whether it be carried properly or not.

27. Whether it is in right condition or not? Yes; this a question which has been on my mind for years. The grower must fulfil the conditions of his contract with the shipping agent, as he has to fulfil his with the company. He may tell you that the mail companies are lenient, that they will not be hard or will not press their claim, but that is not so. I know that Messrs. Knight & Co. could give an illustration of this fact, that the companies will insist upon their pound of flesh. This is the trouble of the trade. While the companies come along and bring their ships to the wharves, they take the fruit if they have room for it, if not, they leave it on the wharf, to the detriment of the next shipment, as it must be, if left exposed to the wind and weather. If the agent is short of the quantity required, they insist on having the full freight. The result is, that when a man is placed in this position to avoid paying dead freight, he is obliged to go and pick fruit from the trees which is quite unfit, because he is obliged to fulfil his obligations. This is one of the chief reasons of the shrivelled condition in which fruit arrives from time to time.

28. Could that be obviated? Yes, I think so. The Melbourne contractors, when contracting with the mail companies for freightage, get conditions subject to fourteen days' modification. That is, if they contract for a steamer or part of a steamer, the amount of space can be reduced if sufficient notice be given. That should be borne in mind by you if you are going to contract with the mail companies. I think if they would be satisfied with seven days' notice that would be a great boon to the trade.

29. Is there any necessity for confining shipments of fruit to the mail companies' steamers? No, I don't know that there is, or why it should be. The only positive cause of the mail companies holding a monopoly is their regular weekly service. Their ships do not carry the fruit any better than outside steamers.

30. Do you think it possible for our contracts to be based on the lines of the Victorian contracts, by which the growers or agents should be able to postpone shipments, or the sending of fruit, by giving reasonable notice to the company? Yes. I think when a grower has entered into a contract to supply an agent with a certain quantity of fruit to fill space, and finds that, owing to the season, he cannot fulfil his contract, he should be released on giving certain notice, and the agent should be relieved on giving notice to the mail company. Suppose he is bound to fill his space, he cannot be particular as to what he is shipping; he must ship or forfeit 4s. per case dead freight. If this could be altered by contract with the mail companies it would be better.

31. Have you given this matter consideration? Yes, I have.

32. Now what would you suggest, briefly, to the Committee, I mean some process by which this difficulty could be removed? In respect of what? If you mean the cool chamber contracts, I think it is the fault of those who are contracting with the mail companies.

33. I know you have given this consideration. I should like to get your opinion as to the contracts to be entered into for the carriage of fruit to England on better terms for the producers than those which now obtain? In the first place, you are surrounded with difficulty. You have here in Hobart shipping contractors for space on board the steamers. They have entered into an understanding with the mail companies that for four years they have contracted for space at 4s. 3d. per case, with 3d. rebate, bringing the actual freight to 4s. Of course, while you have men of this description holding the space and fighting tooth and nail for it, it is natural the companies should favour the contractors. So long as they exist the growers will be paying 4s. a case freight, and so long must fruit be carried as now. So long as the mail companies are willing to deal with these men just so far will the present trouble have to pass over our heads. For these contractors the mail companies will be willing to pass over the heads of the growers. Other means may be tried, but will they be satisfied to allow you to do that? What position are the producers in with the companies, and what advantages do the companies give them? I offer you this question, because I feel it must be taken into consideration.

34. Well? Now the position of the London brokers is another great point. They are prepared to assist the growers, and always have been. For years they have financed the business creditably, advancing on fruit passing through the mail companies' steamers, but they have no faith in outside boats. That is the only difficulty in the way of outside boats coming. Two years ago, when the *Thermopylae* was here, I had a difficulty in getting my principal, Mr. Pankhurst, to finance the fruit shipped by any other than a mail steamer. We tried then to break down the monopoly, and the *Thermopylae*, the boat on which we depended, landed her fruit in very bad condition, and the growers were all in debt. The result was to upset the idea of bringing in new steamers for some years. If outside steamers were brought in Government would have to take the matter up themselves and pay the freight.

35. Have you considered the Victorian system of taking over the export of produce and arranging the trade themselves? Yes; these contracts are now in their third year and, I fear, if the Tasmanian Government were to approach the mail companies they would have to stand by the bond which has been given for at least two seasons, and Government would have to stand by those who now have the space.

36. That is not my question. Have you given the matter consideration of the Government of Victoria having taken over the export of produce into their own hands and dealing with the shipping companies themselves? Yes, and I think the subject a very worthy one. If the Government here in Tasmania could obtain the cool chamber space from the mail companies or from other companies I think it would be a great boon to the trade.

37. Would the Government be tied to the mail companies—is there any reason why they should not deal with other companies? The Government would be asked in all probability to take this position if the mail companies were to come in and lease the space to the Government. They would be asked to contract with the mail companies, and with them alone, and the companies would show the Government it would be to advantage, as they would only give a rebate of 3d. per case freight in consideration of Government dealing with them only.

38. Is there any reason why the Government should not make it a competitive question, and ask others to come in? No, certainly not, if the growers are loyal and will stand to the Government. The Government may then make their own arrangements. I don't think any one would object to any action of the Government in that direction.

39. What do you mean by being loyal to the Government? I mean that the growers are at the present time fickle. They would be quite content to see the Government step in and take an interest in assisting their work, but at the same time if someone came along who was interested in another departure, which the Government might not care about, and if that individual offered to buy the fruit and give a fair price for it, then I think the growers would throw the Government over.

40. Then you think other companies might enter into competition with the Government and give more satisfactory terms, and the Government would then be unable to supply the fruit for which they had made contract for space? Yes; unless the Government had satisfactory assurances from the growers in the first instance, that would be the result.

41. If the Government were to take the matter up, would it be essential that there should be a guarantee that the fruit should be shipped in first-class condition? Yes, most certainly.

42. And that guarantee would have to be made upon an examination of the fruit prior to export and by sampling? I don't think the Government should touch it unless the grower was willing to have the fruit examined before leaving. If there is nothing to hide, the grower need not be afraid of an examination. When a buyer I am particularly careful, and I take a capable man with a tomahawk and make an examination. I take a case here and there promiscuously, of the different kinds, and examine them. I can follow that fruit, and when it arrives in London it will be no worse than any other fruit in the same stack.

43. Do you think there would be any difficulty in sampling the fruit before shipment? None whatever.

44. Do you, when buying, insist on an examination? Yes, I can show you my contract form. I make it distinctly understood that when I buy, that fruit shall be examined before leaving the wharf, and that if it is not up to my expectation it will be sold at the man's own risk.

45. If a man has shipped good fruit, is there any objection to an examination? I should think he should be delighted at an opportunity to show that he has shipped a good article.

46. Now, at the other end. You said you had experience in England as to the trade: would there be any difficulty, on arrival, in sampling and sorting fruit before it is sent for sale? Well, there would practically be no difficulty in sampling and sorting. You can employ labourers by the million, and there is plenty of room, but it would be a big undertaking and a new departure, and for the Government to go in for it would, I think, be a mistake. When you want to make a new departure in a trade like this, you want to feel your way. The great trouble of the Fruitgrowers' Association was nothing else than that it was a madcap scheme. They wanted to over-ride everything. If one man applied for space for 150,000 cases, they would apply for 250,000 cases. They would make application for space whether the ship was fit or not, or whether proper cooling chambers were fitted in her or not. There was no system and no proper thought given. The result was disaster after disaster. If Government is going into this business, they

must go into it carefully, and creep before they crawl. They must go into it gradually and extend gradually, and then you will find present obstacles removed.

47. What effect would a small quantity of damaged apples, in a shipment landed in London, have upon the whole shipment? The present system of sale in the London market means the fruit being branded on the cases. There are so many brands going from here. One brand may be damaged, the other may be sound. The man whose fruit is sound does not suffer by a brand which is damaged.

48. But what effect will a small quantity of damaged fruit have on a whole consignment? It will have a damaging effect on the whole of that particular brand.

49. If that percentage of damaged apples could be removed from the cases and nothing but good apples sold, what would be the effect from a seller's point of view? Oh, if you could sort the damaged apples from the sound then they would realise more money.

50. If the purchaser was assured that nothing but good fruit would be sold, what effect would that have? That would have a far better effect on the whole shipments. Of course, if inferior stuff is kept away, it is bound to put a better complexion on things.

51. Would it not pay the shipper to have damaged apples removed, and only fruit of good quality sold? It is a question whether the seller would be satisfied, although it must pay better in the long run. Suppose a consignment of 100 cases, and 25 are thrown out: there would be 75 cases out of the 100 that the grower would have to realise on, and would be satisfied with that.

52. If the percentage was sold as first-class fruit, or the whole 100 cases sold as damaged fruit? In the long run the seller would be benefited.

53. Would there be any difficulty in getting fruit sorted speedily in London? Oh no, you could get it sorted.

54. You know that in London there would be no difficulty in getting labour to sort? I think you could get it sorted speedily, if you only put on a certain number of gangs. That can be done.

55. *By Mr. Woolnough.*—Do the large importers into London consign to fruit-brokers only, or to agents other than fruit-brokers? The large importers consign entirely to fruit-brokers in Covent Garden Market.

56. Do any importers consign to other than fruit-brokers,—fruit-growers sending home fruit, for instance? Yes, I believe they do.

57. Do you know what relationship exists between these agents and the fruit-brokers, that is, any agent whom the shipper might employ—Suppose I ship fruit to an agent, how would that apply on the market? The relationship between the agent and the broker is nothing. The fruit-broker generally has his own representative in Tasmania. He goes to the shipping agent who presents him with the bill of lading with details of the shipment attached. He is then handed a cheque which covers the cost of the freight and the shipping agency of threepence per case, which is charged by the agent and included in the expenses. When all costs and charges are paid then practically the relationship between the agent and the shipping agent ceases, unless it be a request of the grower that the returns of sale be made to the shipping agent.

58. Can the Covent garden market, on any given day, be overloaded, and by what kind of fruit? Yes, it can.

59. Is it so overloaded occasionally? Yes, it is.

60. How can that be avoided? Well, in the case of overloading, 100,000 cases of fruit is, as you know, a feabite in London, but the weather has a great effect upon the fruit market. In fine weather it is a case of fruit being in demand; in wet and cold or foggy weather people do not go out much, and they do not buy fruit. Under such circumstances sale is slow and the fruit remains on the market. That is the cause of overloading the market.

61. Necessarily then, these circumstances must affect the buyers, and the fruit must either be kept back or sold at a loss? They keep it back if the broker has large sales and there is no surplus. They have to use their judgement. If they find that by holding back they can get better prices, they hold back. A congested market usually arises from the state of the weather. Another cause is that the brokers may have other merchandise in the fruit way coming from other parts of the world that has an effect on a man with limited capital when buying so many cases of Tasmanian apples. If it happens that the market is scarce of other fruit, then the buyer puts all on Tasmanian apples.

62. Is it not the interest of the fruit-broker to take care that our apples should be reserved from sale, when it is likely that the market would be unfavourable? Yes; the fruit-broker sells on a percentage, and the more money obtained for the fruit the higher his percentage.

63. Has he the means of storage for our fruit, such as would be necessary under the conditions spoken of? All the brokers have large warehouses in and about the market.

64. Is it your opinion that growers do not lose particularly through the market being overloaded? Oh yes, they do lose.

65. Can you suggest any method by which the difficulties of overloading may be more completely met? Yes, I can. I may suggest a wider scheme of distribution.

66. May I ask you what is the present method by which the markets, other than London, are supplied? They are all supplied through London, with the exception of a very few.

67. Can you suggest any method by which our fruit could be supplied to large towns, say in the North of England, to greater advantage than through the London market? Well, while I am placing my views before you, I may state that I should very much like to take the position of commercial agent for Tasmania in England. I started to write upon the subject, and if you will excuse me, I will read what I would propose:—

“The duties of the agent would be many and varied. He should have a full knowledge of the trade, both in Tasmania and in London, provincial cities, and continental ones. Were I that man I would endeavour to make friends all round with the brokers and fruit salesmen of all cities; I would be at the ship's side when the ships are unloading; I would withhold or push forward the sale of the fruit, according to the state of the market; I would, by judgment, place a reserve on all fruit coming under my protection, and I would gradually extend my centres of distribution season by season as the trade advances. It would be my duty to obtain all details of each London sale, and of provincial also if not too expensive. I believe

that were the fruit landed in good condition the confidence of London speculators would be again restored, and a brisk trade on purchasing lines could be transacted. I believe that we could ship fruit from here (Hobart) during the months of March and April, and place upon the English markets 250,000 cases comfortably; but the trade requires pushing in every direction, and nothing short of London management will be effectual.

"As regards the scheme of London storing, I feel confident that were I to have the management of the fruit I could work well on the lines required. The matter of obtaining labour is, to my mind, simplicity itself. I have employed female labour to shell peas, to bud asparagus, and to cut beans; and there are always gangs of fellowship porters ready to do any and everything. I am acquainted with the men, their ways, and methods of payment. The only drawback would be the rent of stores, but a little enquiry in this direction may have a satisfactory result.

"You may think that there is only two or three months' work in the year. I would ask you to take into consideration that to extend the trade your commercial man could put a deal of energy between seasons in visiting the provinces of Great Britain and Ireland, and even the continent of Europe, and furnish his report at head-quarters of whatever progress he may make. He could interview railroad and steamship companies and obtain from them their freight charges, and get concessions if possible. Such a man would be invaluable at finding the cheapest houses for paper (wrapping), nails, &c., and, in fact, do much work in the interim. One of my main endeavours would be to find fresh fields for our fruit, and, where possible, obtain orders for cash, as you well know much more can be done by a personal interview than by letter or wire.

"One of the great drawbacks to be guarded against, and which should be the work of the London agency, is the question of *bonâ fide* salesmen. There are numerous bogus fruit salesmen, untrustworthy and dishonest, who, as soon as they learn that the grower can ship his fruit to whomsoever he chooses in England, will lose no time in sending their printed circular (their usual stock-in-trade), and with many bogus references will seek to trap the unwary. The London agent should make this part of the trade his special study, and on him should rest the recommendation or otherwise of any would-be receiver of our fruit, and he should be well satisfied with that individual's *bonâ fides* before recommending him.

"Having the advantage of a fluent knowledge of the French language I would push my enquiries in France, Belgium, and Holland, as there is a possibility of an extension of the trade in those countries. I have a firm belief that were I appointed as your commercial man I could justify my appointment and give a good account of myself."

68. In that paper you speak of being able to supply distant orders in other places than London? Yes, certainly.

69. Is it your idea for supplying orders to other places, that in the first instance you should ship direct to the port of London? Decidedly. We should distribute from London by taking shipments further north.

70. Passing from that, does the apparent large number of brands interfere with the selling price of the whole shipment? The London brokers seem to think that fewer brands would facilitate sale. Country buyers order in London and they prefer purchasing one man's fruit, if the bulk be large enough.

71. That would mean that brands affect the Covent Garden trade? When in England I interviewed Mr. White and others, and all agreed that there were too many brands. If the sale of a shipment is injured it is because the buyers cannot trust the small men whose brands do not give a good idea of the whole shipment—is that a fact? Well, say a London broker is given an order from a country salesman for from 100 to 200 cases of scarlet pearmains. He might say Mr. So and So is shipping, and I will send them on. If the broker has to send 200 cases to make up the parcel he may have to send 10 or 20 different brands. These have to be taken to Covent Garden, and each particular brand valued according to merit. There are many poor men who, perhaps, can't afford to send more than ten cases of fruit, and these men cannot see why their ten cases should not receive the same attention and benefit as those of the larger shippers.

72. Have you considered any way by which you could enable a certain number of cases to be branded of one sort and one quality, no matter who the grower may be? Is there union enough among growers to do that? I am satisfied the growers would not listen to it; I am sure they would not.

73. Assuming they would consent, would there be any practical difficulty in getting a certain number of cases under one brand? There would be no difficulty if you could have a central packing-shed in a district, where the fruit would be sorted and packed under one supervision, and also branded under one supervision. It could then be shipped from the district under one brand.

74. Would the trouble and expense of such union on this side be more than met by the sale of the fruit in London? I think the only way in which you could get such a union would be by obtaining orders from England for the fruit. If you got those orders through the hands of the Government, so that each grower could get payment in advance of so much per case, then they might unite for one brand. Take Mr. Peacock, he has a packing-shed at the Huon; he sorts and packs the fruit, no matter whose it is, in his own cases, and with his own brand. I don't say that some growers have not euchred that gentleman even at that game, but let him explain that to you. If you want union and want the fruit to go under one brand, the grower wants his cash for the fruit, and he wants his price for it, you can then do as you like, and you can get orders in England, if sought for.

75. Then you hold that the difficulty of which you have been speaking could be best met by the Government. In your opinion agents in England would be prepared to send orders over here? I say I believe if you had a commercial man in England acting under Government that orders would be forthcoming. The matter of packing under any brands could be met by the growers being paid in Tasmania for the fruit.

76. *By the Chairman.*—If the Government, by guaranteeing the freight, had the fruit sampled here as good, would not the Government brand be equal to a Trade Hall mark in Covent Garden? Certainly it would; but what perplexes me is that the Council of Agriculture sent a large quantity of fruit in the *Thermopylae*, it arrived in bad condition, and what did the Council's brand do for it?

77. No, quite true; but if the Government guarantee the freight and insist on sampling here before the fruit is branded—if that were done would not that action and the Government brand be taken as a guarantee for purchasers in England? Certainly it would. Anything we can get in the shape of a guarantee, like that of Denmark for instance, where the Government put their brand on all the butter. That is intended as a guarantee that the produce has been sampled and is up to standard.

78. *By Mr. Woolnough.*—As to the different kinds of apple required by different classes of purchasers in England—am I right in supposing that the classes require a different kind of apple from the masses? I don't think so, with the exception of such favourite apples as the New York Pippin; that is a favourite apple. Of course the classes pay more for what pleases them best, the masses have to be content with Adams' Pearmain. A great deal goes in the way of size and colour. In Regent street, for instance, they would require a gentleman's nice sized table apple, unblemished by black spot, and for these they will pay more than the costermonger would who has little heaps of apples on his stall at three or four a penny. Size and appearance goes a long way.

79. Consider an apple different from that required for the rich man's dinner table. From your experience is there anything to be learned by the growers, any information you can give us that would be valuable to the growers, and so assist them as a test of the London market, or do the growers know enough? Well, although the growers may know enough, you have to try and protect the growers against themselves. There are apples which it is useless to send, such as Mobb's Codlins, Dragons, Blue Pearmain, Ladies of Snow, and other soft kinds. You must not send these. Some growers insist on sending Crow's Eggs because they have them, and as a rule they get no returns. New York Pippins, Adams' Pearmain, Scarlet Pearmain, French Crabs, and Sturmers, and a few other apples in the early season, such as Prince Alfreds and Ribstone Pippins will always find a market, but not the Tasmanian Stone Pippins,—that is a different apple from the Victorian Stone Pippin.

80. Can you make any suggestion as to the most practical method of obtaining information as regards some better system of conveying fruit to England than the present cool chamber system.—Can you suggest any better method than the bad method now adopted? I don't know that I can put you on to any authority on that. Of course I have heard opinions of men who should know. I have heard the opinions of one or two practical engineers who have carried our fruit home, and they are the only men who really seem to know. One of those is the engineer who carried our fruit home in the *Australasian*; that man took a great interest in it. I think if you got information from the fountain head, that is the Mail Steamship Company's Office, it might be valuable, but for information respecting refrigerating machinery, the engineers who actually do the work are the men to go to. One of these men came to me and said, "You have got a lot of fruit on board." I said, "Yes." Then he asked, "What have I done; I am the refrigerating engineer, and can't you give me a case?" That was the refrigerating engineer who actually does the work; and he said, "You ought to give me a case of fruit." Well, that man's words gave me a thought that it might be a good thing to offer a bonus, say to the chief engineer, who lands his fruit in good condition. If you were to get information from these practical fellows who actually carry the fruit, they would be the best men to whom you could apply. You could go to the head office for other information. I am not an engineer myself, and could not give you information on those points. I went home with the fruit in the *Port Victor* and used to go round with the engineer, saw the thermometer, and took the temperature; but after all I was not much more forward, although I signed the Log every day. I went below and went on my hands and knees to the blowhole, where the snow stopped me, but I am not a judge of those things. The man told me in confidence that he had experience in several boats, and he knew for a fact that the machinery sometimes gets out of gear, and it is never known to the public. Sometimes for a day or two it is stopped till it can be got into order again, and when that occurs there is no knowledge of it outside. In one of our shipments, as they were getting into a warm climate—I think it was the Red Sea—and the atmosphere was very hot, the machinery broke down, and did not get repaired for two or three days. That, of course, would be disastrous to the growers and shippers.

81. Have you had an opportunity of forming an opinion whether the cost of conveying fruit under a more natural system than the fan system would be less than the 4s. 3d. per case charged by the mail companies? I should think there was a large amount of space wasted under the present system. They make the chamber so much smaller than it originally was, and their freightage must be higher according to the amount of space used for insulating purposes.

82. Then the cost of a more natural system would be less than the present system? It should be less, because they could stow more fruit into the chamber.

83. Can you tell me the maximum number of cases we should expect to be carried by a ship coming in here? Shippers have informed me that not more than 10,000 cases should be put into any one chamber. More than that is disastrous to the shipment. The fruit does not get proper treatment. With the fan system I would never suggest more than 10,000 cases in one chamber.

84. How many cases would you expect a ship coming in here to carry,—30,000? That would depend on the size of the ship. I would not suggest that, but no more than 10,000 cases should be carried in each chamber. You might ship as much as you like at a lower freight.

85. Well, what amount of fruit would a ship be likely to carry? You could not get more than 20,000 cases prepared and ready for shipment. You may look at it in that way.

86. The present boats come once a week. Under any other arrangement, could we do with less than weekly shipments? I would prefer weekly shipments.

87. Any other system would demand some sort of storage in London? Yes.

88. I noticed in London that the Tasmanian apples went bad in the centre: they looked all right outside? I have seen fruit in Tasmania in the same condition. It is some disease at the core, called hollow-core.

The Committee adjourned until 2-15 o'clock.

AFTERNOON SITTING.

JOHN MYLLES JACOBS *further examined.*

89. *By Capt. Evans.*—You gave the Chairman this morning an idea as to how the fruit is distributed and sold in London—do all the auctioneers at Covent Garden sell their fruit at the one time? Yes, that is the custom of the market.

90. Then no matter how much fruit there is, all the auctioneers go into their boxes and sell at one time? They do.

91. Then, instead of having all the purchasers listening to one auctioneer, they are distributed to the different auctioneers? Precisely.

92. In your opinion, could it not be arranged that the several auctioneers should sell at different times? It certainly could. We might go further, and say that special sales of Tasmanian apples should be held at any convenient time. I don't know that it would suit.

93. If you place, say, six auctioneers one against the other, and each anxious to get rid of his fruit, it must be detrimental to the sale of the fruit. If only one auctioneer were selling at a time, and all the buyers were bidding for the fruit, there would be keener competition, and a better chance of getting higher prices: don't you agree with that? Yes, to a large extent; but you must bear this in mind, although you will have a better chance of getting better prices were one auctioneer to monopolise the attention of the buyers, there are one or two questions to be settled. You would not expect to get as much money for the fruit sold by the man who sold last as for that of the man who sells first. The man who gets up and sells first has to supply the country buyers; they do the most spirited bidding. If there are a few good parcels for sale they will not wait for the later sales, but will buy from the first lots, and the competition will be less keen at the end of that man's sale. The last man would not get as good a price as the man who sells first.

94. Yes. That would not apply to practical men who gather information and know where they are. There are instances where at auction sales, the last lots of fruit bring more than the first would. I myself have seen here the last lots bring more than the first lots.—Oh, that is different. The system is different in London: there are no country buyers in Hobart who attend daily sales.

95. Yes. I know you are dealing with large consignments, and no doubt there is common sense in your objection. The only way you might arrange would be that they should not all sell on one day, but that there should be several days to sell on. Could that be done? In summer the auctioneers sell every day, in winter they sell three days a week, on Mondays, Wednesdays, and Fridays. We could arrange that three or four men should sell, say not more than five of them, and that not more than two at a time shall sell. Each of these men has his connection you see, and their personal country trade, which extends outside of London. If they could show that they had any *bonâ fide* demand from country customers for certain kinds of fruit, they could take what quantity they want at the current market-price and sell that way. We might limit the sales to two men per auction day.

96. Do you think the trade at the present a satisfactory one from a broker's point of view? No. The London Brokers, up till lately, have been writing on the subject of the trade, and they seem to predict its doom if the present state of affairs are not altered. They have lost a lot of money in guaranteeing freight and in making small advances on fruit which has not realised the amount of money advanced. One late sale this season showed the condemnation of 300 cases of fruit. Mr. Pankhurst had advances up to 6s. 9d. per case, and in nearly every shipment he has had a loss of smaller or larger magnitude. He is of course grumbling at the state of the trade, so much so that for the future the growers of Tasmania need not look forward to more than freight advances, unless an assurance is given of more care of the fruit in transit.

97. What did the brokers advances amount to last year? 4s. 3d. freight and up to 2s. 6d. per case, that is 6s. 9d.

98. That was the advance? Yes, that was the advance.

99. And in any future business the advances will be confined to the cost of freight alone? I fear so, from the information I have at the present time. There is only one thing; the cables recently received from England seem to show that the English apple crop is a failure. Last year it was a great success, and consequently it gave Tasmanian apples a poor chance in London. Should this season's English crops prove a failure it may cause the brokers to change their opinion as to advances, and if they knew that the Government was going to take an interest, some brokers might come out and make further advances on the fruit.

100. Can you, from your own knowledge, give us an idea whether the trade has been satisfactory from a broker's point of view? I have here a letter dated June 18th, 1891. It is from Messrs. Garcia, Jacobs, & Co., London, and they write in this strain:—

"We received the fruit per *Port Pirie* in due course, and are sending Account-sales by this mail. We have sold the *Paramatta*, and are now busy making out Account-sales. We do not think the fruit by this latter boat was equal to that by the *Port Pirie*, and, if anything, this will tend considerably to bear on future operations. If the outside boats can bring their cargo in better condition than the regular mail-boats, and at a reduced freight, it will give them the entirety of the traffic. We may mention that the reduction to 4s. 2d. is not of sufficient importance, and before another season we shall take an opportunity, either by circular or through the medium of the press, to make known our ideas on this subject, as we speak with a great deal of authority, being well posted in the apple trade in general. We are sure that the remuneration will depend entirely upon the cost and incidental expenses to shippers. They may rest assured that if a large quantity is to arrive here (and when we say a large quantity we mean anything over 100,000 cases) the prices are not likely to exceed 9s. to 11s. With over 150,000 cases the entire trade will have to be extended, and that means that it will have to go into greater consumption, and greater consumption means lower prices. With apples at 9s. for a case of 36 to 40 lbs. retailers cannot sell under 4d. per lb., and this is considered in England an extravagant price, as in other seasons English and American apples are sold here at an average of 2d. and 3d. per lb., and at this figure any quantity can be consumed. We mention this so that you can give our friends our ideas on the subject. We think that, on the whole, our prices are fully equal, if not better than our neighbours. We cannot control the market; all that we can do is to make our sales as judicious as possible. As regards the *Paramatta*, we did not sell them as some were compelled to sell, as we have stores at our disposal, and kept them until a propitious time. Pankhurst and Co. were compelled to sell on arrival, as they have no stores,

and the market people will not allow them to store in the open market, whereas we have warehouses which cost about £500 per annum, and it is of immense service to us to be able to sell when we think the time is favourable. We shall keep you posted in all matters of interest, and shall be glad to hear from you."

101. *By Mr. Woolnough.*—You mention 4d. per lb. as an extra price: was that the price of the case? No, the letter does not mention it as the price of the case. It says Tasmanian apples would have to be sold at 4d. per lb. retail—wholesale they would sell at from 9s. 6d. to 11s. per case.

102. *By Captain Evans.*—In reply to the Chairman's question as to the battens between cases. I want you to clearly show the Committee, in reference to the battens, that the idea that it is a trifle in connection with space is not so. Please show how they are placed in the mail companies' steamers at present, and whether between every tier, or every two tiers? They are placed more than that sometimes, and sometimes only between every three or four tiers. [The witness, by a drawing, showed how horizontal battens are placed between tiers of cases in stowing on board the mail boats, and also the French system of nailing two short battens on the top of each case, so as to secure a current of air between the cases.] He preferred this system, which would meet all requirements.

103. Is it not a fact that the cases are stowed on board the mail boats sometimes in three or four tiers without any battens at all? The cases rest entirely on each other, and battens are placed horizontally by the side of the cases every few tiers. All the cases rest one on the other, and no ventilation can get in.

104. You have read in the papers that Mr. Taverna, in Victoria, states that the cause of the destruction of Tasmanian fruit was that some of it was over ripe when shipped. Is it possible to have Tasmanian fruit over ripe at the period at which we send it to England? In respect to fruit when shipped from here, they may say what they like to the contrary, but from practical experience, I assert that the fruit is shipped from here before it can get ripe. As a matter of fact it does not ripen until four or five weeks after it leaves here. It is often shipped with the pip quite white, too soon in fact. Mr. Taverna's argument is absurd.

105. How many cases of fruit did you buy for your own agent during the last two seasons? The last season I did not buy, the previous season I bought about 25,000 cases, the season before I shipped 40,000 cases, or a little more, to one firm.

106. How did you get space for these—did you go to the mail companies? Now you ask a question. I went to the mail companies in Melbourne, but they referred me to their agents in Hobart, and they, likewise, referred me to the contractors for space, Messrs. Jones and W. D. Peacock.

107. That is, the shipping agents? Yes, the shipping agents.

108. When you applied for space to the mail companies did they raise any queries, or state the reasons why they could not give you the space? No, they simply refused me. They said their space was let, and they left it to their Hobart agents, and I must go to them if I wanted space.

109. Did they never tell you that their applications for space were far and above what they could supply? Yes, that is the case. They told me one year, when I went to Mr. Withers. I asked if it were possible to give a reduction on the freight. He said in the face of the applications and over-applications for the amount of space available, it would be absurd to give a reduction on freight. The more I tried to persuade him, and the more I showed he would be doing justice to the trade, and largely increase the quantity to be carried, the more he insisted that in the face of the great number of applications he could not do it.

110. Do you think it feasible that any steam company would give you a reduction in rates when they had double their space applied for? No, I can't blame them, of course.

111. How long before the fruit is shipped from here have you to guarantee the mail companies as to space—how long before the fruit is shipped from Hobart? I have known a guarantee given when the ship is going.

112. I don't mean a guarantee going on. When do the mail companies demand from the agents at Hobart what space they want by these mail boats? Within a short time of shipping. The absolute fixing of the quantity of space available in a ship is within a month of the ship coming along, but their applications would be in before.

113. That does not tally with your statement to Mr. McWilliams, that the shippers were pushed in getting fruit, and that if they could not get the fruit they had to send rubbish. I ask you, when do the mail companies demand from the agents here the space they require in the boats? The shipping agents in Hobart make application for space six or eight months before shipping starts, the absolute time when the companies allot the space is within a month of shipping. The shipping agent, long before he gets his allotment, has had his agents travelling round the country getting the growers to select their lots and name the quantity. They have to do this before they can tell the companies what they will want. They have first to go to the growers and buyers and see what quantity of space they can guarantee to fill.

114. Of course that is done, but is it not the case that agents often apply for double the quantity of space they want, or that they have fruit to put in the boat. That is where the monopoly comes in, is it not? Once a grower agrees to send a certain quantity of fruit the space is applied for, but later he sends to say that he can't supply the fruit, and that is where the trouble comes in.

115. You said, in reply to the Chairman, that if a quantity of fruit was stacked on the wharf for one of the mail boats—take the *Parramatta* for instance—coming in for say 25,000 cases, that if, when the ship was finished stowing, they found they could not stow within 5000 cases of the lot, left them for the next boat—do the mail companies allow any concession to the growers for not having carried the fruit representing the amount of space allotted in that ship? None whatever. Nothing like 5000 cases were ever shut out.

116. On the other hand, if the agents fail to supply, and only 23,000 cases are forthcoming, then would the mail companies make the growers pay freight for the 2000 cases short? I think they would; but to save that trouble, others have fruit ready to hand to sell to the shipping agent to help him out of the difficulty. It may not be up to standard, but they take it to prevent them having to pay dead freight. The *Skipjack* and other vessels bring down fruit for sale if the quantity is short. They send fruit picked anyhow, Crow's Eggs or any sort, and the agents often buy it to fill up the space.

117. Then, this shows that the mail companies have the whole thing in their hands, and that the growers are powerless? That is so.

118. Now, on this matter I want you to be clear—You told Mr. McWilliams that there would be no trouble in getting men in London to pack or repack 20,000 or 30,000 cases of fruit should it arrive in bad condition by the steamer? Yes.

119. Do you think it practicable to go to 20,000 or 30,000 cases of fruit and to have it prepared ready to sell, that is, to have it repacked, sold, and got rid of before the following boat would arrive, and make a litter with another 20,000 cases? You would be likely to overstock the market a bit if it was in a week. That is not likely.

120. I give you the outside limit, a week—I know it has been said, it might happen in three or four days, but I give the outside limit, a week—Do you think it would be practicable to repack 20,000 or 30,000 cases of fruit and clear them before the other boat would be on top of you? That is rather a big order, to take apples on the market and have them repacked and sold. It is a broad question. You might have the fruit repacked and place it on the market, but the result might be to overstock the market at the particular time. You might have to remand them for a few days, especially if you have cold weather and could not sell. You would then hold the fruit back, and would have to work the next shipment if you have a weekly service, or you are going to put on from 20,000 to 30,000 cases a week.

121. You have referred to the same quantity before? But not repacked.

122. No, but if not repacked, that would not matter. Could you, even then, get rid of such a quantity before the next lot would be on the top of them? You can repack them, and you can hold back and store and sell so soon as opportunity arises. If a subsequent shipment comes on top of them then you must store those.

123. In your opinion, would there be much chance of the sale of the fruit after the arrival of another boat, say with 25,000 cases in good order. Would there be as good a chance of selling that fruit as at the time of its arrival in the first instance? If it was sound fruit.

124. Yes? You could answer that question better when you saw the market. If there was a ready market you could sell it and follow with the next cargo.

125. *By Mr. Bradley.*—If the question of repacking is essential? Yes.

126. Well, it seems to be admitted it is essential, if you would ensure good apples only, would it follow that all apples should be repacked; and, if a week took place between the shipments, you would still have a full week to repack? Suppose you repack, you then market that fruit, and then you have a second cargo in on top of it. If there is still a market when the other ship with 25,000 cases arrived, you would go on selling. If the market dropped a shilling or eighteen pence a case on the last lot sold, then you would store it and wait, because there would be another week before the arrival of the next ship. You could repack 20,000 cases of apples and market them in seven days, but to sell them depends entirely on the state of the weather, which invariably rules the trade. You might lighten the local London market by using other markets in the Provinces.

127. But you would go on repacking the next lot also? No, you would not necessarily repack if you saw the fruit was sound. You would only repack that fruit which is not sound.

128. Would not the repacking apply to all cargoes? No, some cargoes might not want it.

129. *By Capt. Evans.*—Would it be possible to repack the fruit without its becoming known all along the market and amongst the brokers? It is bound to become known. If you wanted to prevent that you could not; no, it is bound to become known, but it would be no detriment.

130. You know the class of men you have to deal with—they are very wary, and know what is going on, and they know what is being done with the fruit—I ask you this question, Don't you think the fruit might fetch as much, or even more, if sold on arrival, as if repacked in this way and sold afterwards? No, I don't. I had an opinion a little while ago that you could not do better than sell it on the market when you get the cargo home. You see the fruit is subjected to high and low temperatures, and that means that it should be almost immediately sold. You can't tamper with it, because the moment you do it begins to go brown, and the more you touch or tamper with it the worse it gets. Look at the Sydney market, even. When they once start repacking, there is no end of bad fruit in the cases; and the more you tamper the worse it is. If your fruit is firm, although it may have got a little musty or wet in some way, or on the ship, you might repack at once, with some assurance that it would pay the grower.

131. Then the reason you would object to repack is that you run a risk—you can't know what the fruit is like until you start to repack it? Yes, you would have to open a number of cases of the fruit of course, as an Inspector would.

132. But you would not open to any great extent. You must find out whether your cargo is sound, or in what condition it is in? Yes, you must open a few cases.

133. My experience in the Colonies is this: if you take fruit to Sydney, for instance, and it lies on the market for a day or two, the buyer will not buy that fruit when he knows that another steamer is coming in with fresh fruit. The fruit held back invariably brings a less price, because of its having been held back. Is not that so? Yes, I used to think it best to sell at once and not to keep fruit till it gets bad, which it was liable to do in a warm climate; but you have now new conditions. You are now going to take fruit from a cool chamber to a new atmosphere. If the fruit is shipped in a cool chamber and, on arrival, it is found that a certain amount is damaged, if the condition of the fruit is not good enough to be touched it should be let alone. If it was firm enough, you would repack. It need not want the repacking of all that fruit. I would not let the whole cargo go to waste by selling it on its merits, but if it would stand I would have it repacked when it got to England.

134. You said that the brokers were willing to finance fruit shipped in outside boats, till the *Thermopylae's* cargo arrived in bad order—is that right? Yes.

135. You are aware that this was the first attempt of outside boats to come and break down a monopoly. I think there were only three boats that season? That was not the first boat.

136. Yes, there were two or three before; but no regular attempt from outside boats to touch the trade. How many times have the mail company's boats failed to carry all their fruit in sound condition? I can't say. A great deal more than once, I should think.

137. The mail company's boats have failed several times in carrying their fruit home, and the outside boats have only failed once? More than once, I think. There was the *Port Pirie*. Well, she broke down. That was not a failure exactly, but the effect of the mishap upset the chance of the outside boats.

138. You mean the failure through the refrigerating machinery breaking down. That might happen to any boat? Yes, the cargoes by the *Port Pirie* and the *Port Victor* were perfectly successful, and the *Australasian's* cargo was also a thorough success.

139. Was not the *Australasian's* cargo landed better than any cargo ever landed in London? Yes, I have that information.

140. The *Warrnambool* also landed her cargo in good condition? Yes, there was nothing to complain of whatever.

141. Was not part of the cargo of the *Warrnambool* sent to markets outside of London? Yes, some went to Manchester, and was landed in fine order.

142. Then, that shows that outside boats are at least capable of carrying their cargoes in good condition? Yes, I am satisfied that is the case.

143. You stated that the mail companies carry fruit at a rate of 4/3 per case with a 3d. rebate? Yes.

144. What did the outside boats carry the fruit for? 3/6 per case, I think, or 3/9.

145. Then, they carried at about 6d. per case less than the mail companies? Yes. The 3d. per case rebate allowed by the mail boats is a perquisite of the man shipping, conditional on his not shipping by any other steamers. The shipping agents are bound by contract for four years, but they must not ship by any other steamers.

146. You told Mr. Woollnough that it was preferable to have a weekly service. Don't you think it would be an advantageous arrangement if you had an outside company with boats taking fruit every fortnight, and which could give say two parts of the ship, with a capacity for from 25,000 to 30,000 cases fruit? Yes, if the mail steamers' cargoes did not come in between and upset the calculations.

147. You think that there is a possibility that, under such an arrangement, outside steamers with cargoes might come in and glut the market? Yes, you will find plenty of opposition there.

148. The question was put to you by Mr. Woollnough, as to whether there was anything between the broker and the shipper: I will put it straighter. To your knowledge has there been any commission given by the broker to the shipper for any fruit he could send to him? I know, and believe, that Messrs. Jones and Co. acted as agents for a certain firm that Jones and Co. had taken up, but I believe that between the London brokers and the shipping agents no relationship exists.

149. And no commission is given in connection with fruit to be sent to them? Jones & Co. once wrote to Draper & Co., but failed to do business in that direction.

150. How many cases of fruit did the Messrs. Peacock themselves buy this season? About 50,000.

151. That fruit was packed in central sheds, was it not? Yes, much of it.

152. The bulk of it? I don't know about that.

153. It was all shipped under one brand? Yes, that packed in the central sheds would be all under one brand.

154. Then, if Mr. Peacock liked to have all fruit sent to the central sheds, he could have all under a first-class brand? Yes, there would be nothing to prevent him, except that he would be compelled to fill up his space. It is possible that Mr. Peacock would send nothing but the best from the sheds, first-class fruit throughout, were it not for the mail companies, which had to be satisfied. He would be bound to fill up in order to meet his liability for space.

155. By Mr. Bradley.—As to outside boats,—there were the *Port Pirie*, the *Australasian*, the *Warrnambool*, and the *Port Victor*? Yes.

156. I believe you went home in the *Port Victor*? Yes, Sir.

157. What route did they take? The *Port Pirie* did not go through the canal, the *Port Victor* went through the canal.

158. I think the *Port Pirie* went round Cape Horn? Yes, I think she was 101 days at sea, and had to go into a port.

159. Then there was the *Thermopylae*, an outside boat. What difference is there, if any, in the arrangements between her and the mail boats in regard to the cool chamber? I think they were on the same principle, but I can't say for certain.

160. The *Thermopylae* went by the Cape of Good Hope, I believe? Yes, she did; as to the difference in arrangements, I am not an engineer, and cannot talk about insulation or refrigeration.

161. As a shipper, do you consider that, notwithstanding the heat going through the Red Sea, you prefer sending fruit by that route rather than by the Cape of Good Hope? Well, the question never struck me. We only want to get the fruit to market as quickly as possible, and the difference in the journey gives us, I think, more advantage than if it went *via* the Cape. If you have cold air going from your chamber going through the Suez Canal, you should be able to work so as to avoid the heat. I can't say whether the heated iron in the bulwarks would have any effect,—of course they do get very hot; and whether the amount of air pumped into the cool chamber would be enough to keep the bulwarks cool is a question I cannot answer.

162. It appears to me that the *Thermopylae's* route would be subject to high winds and heavy seas. The question is whether that would affect the fruit? I don't think so. The main thing is to keep the chambers at an even temperature. If that is done it would not affect the fruit at all.

163. By Mr. Woollnough.—Within your experience have the importers of fruit by these outside trips had as good an opportunity of getting good prices as those who send by the mail boats? Oh yes, certainly.

164. Within your knowledge is there any room, in your opinion, for selling Tasmanian apples in Continental markets? Do you mean in France?

165. Yes, in France: you know, of course, that in that country it is the business of every *restaurateur* to keep some sort of dessert? Well, I was in Paris in 1875, and made it my business to see if Tasmanian apples could be put on the market there. They said they might take a few of them, but they have late apples themselves, such as russets, that would go right into our season; then shortly after our season they would be getting their own soft fruit. I think we should have a poor show in France, but there are other

markets where we would have a very good field—in Russia, for instance. When I was working in France as a shipper of pears we used to get Russian orders. They wanted the very best, and would pay fabulous prices for them. They would go chiefly to St. Petersburg and as far as Moscow. If we had an opportunity in London through our agents to communicate with Russia, I believe there is a good market there for fruit. We could tranship from the steamers at Colombo to vessels going to Russian ports. I think, also, Hamburg could do with a little of the best of your stuff. Belgium is also in evidence, and, I think, we could give a little to the Dutch. Then there are the Germans. These markets have never been rooted out for us by anyone taking an interest in it. Denmark and Sweden are very late with their apples, and I doubt if we could touch them; but in Germany and at the sea-port towns of Belgium and Holland there is business to be done. Spain I do not know enough about. When at Colombo I made enquiry about India, but, I fear, there is a small field for us there.

166. *By the Chairman.*—What about South Africa? That would be about in the same field with Australia. They are on the same geographical line as ourselves.

167. *By Mr. Woolnough.*—Apart from English stored apples, are there any rivals in that market when our shipments arrive,—any other apples competing with us? Yes. This season we have had a very bad rival in Canada and Nova Scotia. They shipped three shipments of apples ship for ship with us of Russets last season, but they have no other apples to give to the market at the time when ours arrive; but I don't think they could live against our Scarlet Pearmaines and others.

168. Looking to the bad shipments last year and the failure of brokers to secure the best prices, are you aware of any recommendation of theirs which might be useful for the Committee to know—it is possible they might have some knowledge of alterations that should be made? The London brokers are saying this, that they are looking forward to alterations being made. They are now as unsatisfied as they can be.

169. Are they suggesting anything? We have letters from Garcia, Jacobs, & Co. by the last mail or two, which point to the fact that something else should be done at this end. For instance, they do a large business in bananas, sending them right through from Jamaica. They were sending a lot of bananas from there, and the whole of the shipments were cooked dead as a door-nail. The parties who had to do with them called in an expert's opinion, as they wished to know the best way to deal with them. It was found they had allowed the bananas to be put into a chamber heated. It was some days before the chamber could be brought to the temperature needed. The result was they were over-heated. They were advised, before shipping, to get the chamber down to a certain number of degrees Fahrenheit, and when they did the next shipment arrived in splendid order. It had continued so since, showing that the chamber should be cooled beforehand.

170. *By the Chairman.*—Are the chambers cooled at all here? No, I think not. I am not certain whether they commence to play upon them at all until after the Victorian apples are put in. I don't know.

171. Would you advise, with your knowledge, that Government should be asked to guarantee the freight of the apples to England? Yes, certainly, and I will give my reasons. If the Government were to be able to treat with the mail companies, I think they would make better arrangements than exist at the present time. The arrangements under which space is now contracted for are detrimental to the trade, because the contractors are content to accept a contract and pay the same amount for freight in any case, nor do they ask any refundment of money or anything of the kind if the fruit goes wrong. There are several reasons why the Government should take up the contracts. They would not be fettered, and could make a much better bargain than the men who now take up the space. They would not be fettered, and should make a much better bargain for the trade, whether with the mail companies or outside steamers.

172. Would it be essential that they should have a complete system of sampling the fruit before shipment? Most essential. I should never advise the Government to accept shipments of fruit sent by growers unless they were inspected and sampled. All fruit should be inspected for the grower's own sake, and for the sake of all the trade, and it would be necessary if you want a man to go to England to push the trade. The best of buyers will want to get twenty shilling's worth for a pound, and if you can't assure that you need not try to push the trade.

173. *By Capt. Evans.*—You told the Chairman that you would be satisfied with the inspection of say one case of each kind of apples taken at random. Do you adhere to that statement? Yes; unless the man himself who sends the fruit along is worthy of more notice.

174. You mean, some men you would trust, and some you would not? Yes; there are men I would trust, and whose fruit I would not want to look at at all. I would not insult such a man by examining his fruit, because I know him to be conscientious; but where there is one like him there are a dozen of the others.

The Chairman thanked the witness, who withdrew.

FREDERICK WILLIAM JAMES MOORE, called and examined.

175. *By the Chairman, Mr. McWilliams.*—What is your name? Frederick William James Moore.

176. You know the object of this Committee? Yes; I have read the motion and most of the debate upon the subject in the House.

177. You were for some time Secretary of the Council of Agriculture; were you not? Yes, for four years.

178. During that time, or since, you have taken considerable interest in the produce trade, have you not? Yes, and prior to that time.

179. Have you given the subject of cool storage in the Colony serious consideration? Yes; not so much since I was Secretary of the Council of Agriculture as at that time.

180. During that time did you go into the subject? Yes, very considerably. Perhaps the present cool storage in Hobart is practically the outcome of my action. I collected a lot of information for Mr. Pender, and also distributed it broadcast, besides urging butchers, growers, and farmers to support it.

181. Do you think it practical and advisable for the Government to establish cool storage—one or more depôts—in the north and south? For what purpose?

182. That is what I was asking you? It will depend upon what is the object of the cool storage. I will explain what is in my mind. The cool storage which the Government might provide would be for export purposes. [Chairman: Not necessarily.] To my mind, yes. Cool storage for local requirements should be provided by private enterprise. The Government should provide cool storage for export purposes, but would have to be content to provide a large expenditure without adequate return for some time. In, say, lambs, pork, and butter I believe we could work up a good export trade, but it would take a few years. The proposal I had to do with was to begin by finding a cargo of lambs and pork for a vessel, the *Timaru*, a sailing ship, that is, beginning as Geelong started their trade. They started by freighting the *Timaru* with a cargo of frozen mutton. Next year they sent again and had to find a larger vessel. They worked along gradually, and now they have large freezing works. A vessel like the *Timaru* would take 15,000 carcasses, and, of course, that quantity would take a great deal of labour in collection, not so much now, perhaps, as when I made the effort, because there has been a considerable increase in the growth of rape and other fodder crops, which has enabled us to carry on up to the present time this year without any considerable importation of meat. At the time I was enquiring as to having this plan adopted here I had several interviews with people acquainted with the trade, and a very long interview with the engineer of the s.s. *Gothic*. From him I ascertained that if we had had 5000 carcasses of lambs they could have taken them on; but to carry on the trade they would like to know at Cape Town what quantity of space we wanted. If they were not advised about the space required before arrival they would be detained eight hours longer here cooling the hold down. He said that if we had a few thousand carcasses like that ready the frozen-meat shippers of New Zealand would often be glad indeed to take it up.

183. Did he mean they would buy? They would either buy or would have the space filled up by it so as to save charge for unfilled space. The trade would be for lambs and pork. We might do other trade in sheep, but not for a year or two. I would like the Committee to understand that they could not get lambs and pork at the present moment. The trade would follow if the outlet were provided. It would be a repetition of the New Zealand shipping trade. When they started they had only about 10,000,000 sheep in New Zealand, now they have 20,000,000, and export two millions a year. At that time 100 acres of turnips could not be found on one estate; now you have it a common thing to find 1000 acres. As soon as an outlet was provided for the sheep the farmers provided fodder for them, and the same thing would happen here.

184. Then you think that as to local production the Government should not interfere? Undoubtedly. Government should only foster an export trade, and find new markets for us.

185. Do you notice that we export a large quantity of butter in the season at a low price, and during winter import large quantities at higher prices? Yes; but I find the quantity imported has decreased. I would rather see it increase if assistance were given the people to establish butter factories. The mere fact that we import and export is not such a terrible thing as people think. As to that, Victoria has imported butter from England within the last few months, but no one would say on that account they should not export butter. At the time we export butter, we cannot get good prices for it here. We have more than we can sell, and it is a question whether it would pay to store it. If the producers did so they would require to be financed for at least four months. Their milk supply has to be paid for, I think, every month, and they have other accounts to settle. This would mean the payment of interest to enable them to carry on.

186. Then, you would not advise that the Government should have to do with bonuses or subsidies, or interfere in any way with the storing of butter, meat, or other produce during summer? Well, I don't like either bonuses or subsidies, unless to be returned in a certain time. The Government might help a factory to provide cold storage, but it would be when it had good security. A better plan would be to lend money to a certain number of producers if they formed themselves into companies, and let them repay the advance at a later period.

187. Do you think the Government would be able to get back the loan? Well, the same thing is done now in the case of local bodies—Loans are made for waterworks and other things. I don't see why they should not get back the loans. In Queensland they have done a great deal for meat exporting and butter exporting under their Meat Export and Dairy Encouragement Act.

188. Do you know the Canadian system—there they give a bonus to any company establishing cool storage? The difficulty our butter factories labour under is that they started so much later than Victoria, at the time when butter had decreased in value to the extent of 20s. per cwt. Victoria had the advantage of State assistance for cool storage, but I think they would have done what they have done without any State assistance at all.

189. You have given some attention to the department of the Council of Agriculture? Yes.

190. You have experience of the working of the Council and of the Act, having been Secretary? Yes.

191. Is there any amendment you could suggest with the view of encouraging local production? Well, I can't suggest much amendment in the Act.

192. Or the constitution of the Council? No. I believe if you could secure an elective council it might be better, but you would have great difficulty in providing a constituency for it. I think, with regard to the Council of Agriculture, that it can do a great deal of good if provided with sufficient money, and allowed to go on without too much interference.

193. In what direction? To my mind the functions of the Council of Agriculture should be to investigate and experiment for the advantage of the producers of the Colony. I don't think the Council should trouble themselves about finding markets for producers; that is a thing for the agents appointed by the Government Departments; they should act as the medium of distribution. The principal work of such a department as the Council should be to have a few skilled experts in different lines to investigate

and experiment on behalf of the producers. Take the Black Spot in apples, for instance, the worst evil we have in the trade—the Codlin Moth is a mere bagatelle compared to it—yet, at the present time nothing is being done in the way of systematic investigation or experiment to check the evil in any shape or form. When connected with the Council myself I found a difficulty in getting sufficient funds to carry out experiments. It seemed to me that unless we could say at the end of the year whether the work was a success, it was looked upon by Parliament and Government as wasting money. It might take many years to produce results.

194. How far would you think it advisable to extend the operations of the Council of Agriculture, constituted as it is, and in what way could we allow them to expend moneys in the experiments made? When there I thought if we had, say £2000 a year, to spend in such manner as might be thought desirable, we could have done a great amount of good. With less than that I did not see what good we could do. That was one reason why I relinquished it, but would have continued and struggled on with £1200 for a year or two.

195. Have you a knowledge of the Departments of Agriculture in the other Colonies? Yes.

196. How do they compare with the Tasmanian Council, as far as encouraging local industries? Well, they cover a great deal more ground, and they undertake many things it would be impossible for the Council of Agriculture here to undertake, unless supplied with means to the extent of tens of thousands of pounds. That is going a little bit too far.

197. Do you think the methods adopted in Victoria and New Zealand have been successful or have warranted the outlay? That is rather a wide question.

198. I know you have given the matter many years' consideration? Yes, but it is a very large question. It involves the success or otherwise of all that has been done with a view to exploiting markets there or elsewhere.

199. Take results generally. Do you think in Victoria and New Zealand that they have justified the means, almost of limited State socialism, that have been adopted? Yes; when a Colony undertakes this export business, it is entitled to look to results. I certainly think Victoria, as our nearest neighbour, has done well out of it.

200. New Zealand has done much better? I don't know that she has, and I don't think so. New Zealand has not gone into it in the same way Victoria has. Victoria has done well with her butter. Many leading financiers and politicians say that the butter saved Victoria, and, while I am opposed to the bonus method, I believe in this case the end justified the means. Still they might have done it in another way, although Victoria has done well in regard to her butter industry. In New Zealand, where they should be able to produce it, they don't make such good butter; their cheese is better, in fact, the best. Their frozen meat trade is not the result of Government action, but is due to private enterprise. When you come to realise their Department of Agriculture it is perhaps going too far. I think the real function of such a Department should be, as I have said, to carry out systematic investigations and experiments with a view to show producers how to produce cheaply, and to get over evils that are at present beyond their control.

201. Would you advocate the establishment of any system of Technical Education for Agriculturists? Yes, as a beginning, so far as the State is concerned. I am not particularly enamoured of Agricultural Colleges. I think some system of Technical Education should be instituted. It should begin by the use of a small primer on Agriculture in State schools, such as that of Blackie; it might be used as a reading-book. The immediate result might be hard to discern, but if it were followed up by practical instruction later on, much good would be done. Then, much instruction might be given by many teachers we already have, who might have classes at night. They might impart knowledge to the young men engaged in practical farming, which would be of great advantage.

202. What is your opinion on the subject of experimental plots? Of course they are valuable, but the whole subject is so bound up, one thing with the other, that it is difficult to say where to begin. If the Council of Agriculture were to run on lines that would be best for it, then the two things would dovetail in. The Council of Agriculture, consisting of twelve members, should have three members interested in dairying, three for fruit, three for stock, and three versed in cereal culture. The permanent staff of the Council should comprise experts in each of the different lines; these experts, under direction of the men intimately connected with the lines, would see to the carrying out of certain experiments. The experts would deliver lectures in the different places, and thus stimulate the interest of men in various parts of the country. In that way, those young men who had been getting practical instruction at the night-school would be able to gain further and more practical instruction from the experts and their experiments. Take, for instance, the horticultural expert. He would be experimenting, say, in an orchard in the Huon district for the cure of black spot. He would, at the same time, while attending to the orchard, explain all he was doing, not only to the young people who might attend, but to the orchardists around. He would also gather their views, and get evidence from them as to the evils with which they had to deal, and he would show them how to graft, bud, prune, and propagate in the most approved manner, things which many orchardists do not know how to do. Of course I can't state all the work a man like that would do, for it cannot be said how far its influence would extend. It is very difficult to get people to take an interest in these things. But I would say let him alone, and let the Council of Agriculture work the system on, and you would soon have similar results as in America. There, when the experimenters went out first they were laughed at, now, when they go out, they find themselves placed under examination by young farmers, who seem to know almost as much about scientific agriculture as they know themselves. Of course it takes time; what I am stating is the result of 12 or 13 years' working.

203. Then do you think the Council of Agriculture as at present constituted would be enough if it had sufficient funds? Yes. You must have sufficient funds, and it should be so extended that it should have three members for horticulture, for stock, for dairying, for cereals, and run right through in that way.

204. You mentioned an amount? Yes. I thought £2000 would be enough, that is looking to the salaries of the experts and the general expenses. Of course I do not anticipate such charges as railway travelling, customs duties, and that sort of thing, that run into £200 a year now, and which under my system would amount to nearer £400.

205. Then, if you had £2000, although not the actual money you would require, if it were there and could be used in the payment of salaries and expenses, it would be sufficient? Yes, that would be sufficient. Of course, we should have to get seeds and cuttings also, but that would be sufficient.

206. Do you think the expenditure of such a sum would aid materially the producing interests? I do. You must not expect a great improvement all at once, but it would aid materially in the general education and improvement of the farmers, and consequently of the farming industry.

207. Do you think it necessary to have a ministerial head of the Department of Agriculture? Not for this alone. I think under that system it would be enough to work to any one Minister. All he would be wanted to do would be, practically, to control expenditure. Of course all expenditure would have to be approved by him, on the advice of the Council. He could be the Minister of any other Department, and this would not interfere much with his other duties. If a Council like that were left to itself, as it should be, it would not cause much work to a Minister. A Council of sensible men might be entrusted to recommend the expenditure of that amount of money as well as any Minister might be expected to do.

208. You know the objections to a nominee Council? Yes.

209. Would you think it advisable for Parliament to vote money to a nominee Council not responsible for expenditure? I think you know it is possible to nominate a Council like that, which would serve as well as an elective one. When you come to elect a Council you get some peculiar men on them, then when you elect a Council you have to bring men from all parts of the country. This is not necessary as far as mere differences in methods of cultivation are concerned, say as regards a ton of potatoes grown here or on the North West Coast. In South Australia, where they have a very excellent Council, or Bureau of Agriculture, it is not so. There they have fortnightly meetings of the Bureau, and I don't know of any country where there is so much good work being done. They have a large number of Boards meeting regularly all over the country, and they are quite satisfied that the Council should be formed from men living close to the city, men who are always on hand and always in touch with each other. Where you have to bring the members from all parts of the country, you will find when you call a meeting that the very member you wanted most particularly to see present was unable to come, or could not spare the time to come such a distance: owing to this, I have thought often it would be better to have a few men living within, say, ten miles of the city. Two members of our Council from the North West Coast always said men near Hobart would do, but they seemed to think the people were not satisfied with it; I don't know why they should not be so.

210. Then, practically, you think it is not possible for the Government or Parliament to materially aid the producing interests outside the direction mentioned? Oh, yes. I don't want you to understand that I think that is all the Government should do, although it is one of the first things with the idea that it is to materially improve the produce of the farmers. To do that you must add to his knowledge—show him how to combat various pests, and how, by better cultivation, he should be able to add to his output. Take the item of rape for instance: you heard me say that we showed how they could by that produce more stock. They have produced more rape, with the result stated. I take credit for the Council for getting that understood. I always circulated information about this when Secretary. I published several little books about rape and about the way of feeding it to stock five or six years ago; at that time not more than half a dozen farmers grew rape to any extent; I know that this year there are at least a dozen growing it within 10 or 20 miles of Hobart, and more are going into it. There is another very important work for the Government to do, and that is to have a thoroughly good agent or agents in the markets of the world, take Great Britain for instance. That is a point which was fully and frequently recommended to Mr. Henry when he was Treasurer several years ago.

211. And what do you advise in that direction? Well, I have written down a few remarks on that question, which I will read. This Colony is very well situated for manufactures, and there is a good deal to be done in that direction:—

“We want to distribute our products and manufactures upon a basis of mutual exchange with the people of far off lands. Great Britain is the market we have most to expect from, but there are British Dependencies, such as India, Canada, and Africa, which can take a great deal from us. What we ought to do, is to introduce these products and manufactures to the notice of the buyers and consumers of these countries, and to do that we need a good agent, properly informed,—a real live man with a determination to push the goods sent from the Colony in the right quarters. It is impossible for us to tell him where to go or to direct him from here; he must decide that for himself, and he must not be afraid to take responsibility upon his shoulders. Nor should he be interfered with by anyone who is not thoroughly conversant and in sympathy with his movements. A local commercial traveller may be able to send orders to his firm within a few days from starting out on his trip; it often takes six, ten, or twelve months before seed sown in foreign fields can bear fruitful orders. A careful buyer needs information, asks for full data, which necessarily involves considerable time and correspondence. It is therefore necessary to send out proper data in advance of orders; this is sorely needed in regard to our timbers. We must study the interest of the real and actual buyer thousands of miles away; his money pays the bill, and it is to our interest to please him. He wants to know on the spot what a given article will cost. If the information is to be gained only through correspondence, months, perhaps years, are necessary; in the meantime, a man in the field with samples and definite prices waits on him and secures the order. We want to familiarise such buyers with our goods and brands; we must send them good goods at a moderate profit, and make up in volume what we lose in margin; in a few words, apply the same principles generally followed in local trade to export trade, and treat with the real ‘foreign’ buyer in his own land.

“The Hon. Claude Meeker, American Consul at Bradford, England, reporting to his Government, said:—“Hitherto large wholesale importing firms in London or Liverpool have generally been solicited to take agencies for American specialties in manufactures or in certain products. The older and wealthier these firms, the more conservative they have been. Operating on recognised lines, they have hesitated to take up new commodities and have been slow in pushing them when they did. For this reason many an enterprising American firm has found itself with very respectable agents in England, but without trade. Recently some United States houses have discarded this old-time method, have sent over their own agents

and their own travellers, and called upon large retailers, directly soliciting import orders. If the result has been as beneficial in other parts of England as it has been in Bradford, such firms have reaped a rich harvest and have inaugurated a business that will continually grow.' Going into details, Mr. Meeker shows that such articles as brass valves, files, shears, &c. are being imported from America to Bradford, and competing with Sheffield and Warrington houses, the orders for American files running to 1000 doz., where 200 doz. is considered a large order for an English house."

That shows what can be done by actually placing these things before people. A great deal could be done in Great Britain if we had a good agent to introduce our produce. Take timber, and see what Western Australia has done with her timber trade. One reason is, that a powerful syndicate operates in Western Australian timber, which takes care to place it before the people. Tasmanian timber is not put before the people, who are buyers, in the way that it should be.

212. Then you would advocate a commercial Agent-General? Yes, and that the agent should be kept supplied with the latest information, and if he wanted £100 or £500 worth of goods as samples they should be provided by Government. I see a way to open up trade. Take the timber industry: here again our saw-millers are not in a position to send away £500 worth of samples and practically to give them away, which they would have to do. If we had a good man in England looking out for orders, and with plenty of samples to show, he would get the orders and would do good in other ways; such a man would get us large orders, and every order he got would be an advertisement.

213. Do you think such an agent could materially increase the export of Tasmanian products? I do. I believe not only in products at the present time sent, but in others which are not known at all, and which we don't know whether wanted or not. If we had a man who would advise us as to what he saw, and what was required that we could produce, it would do good.

Committee adjourned until next day at 2:30.

THURSDAY, SEPTEMBER 2, 1897.

FREDERICK WILLIAM JAMES MOORE, *called and further examined.*

214. *By the Chairman.*—During the time you were Secretary of the Council of Agriculture, had you taken any action in regard to the matter of the export of fruit. Yes, on several occasions.

215. What led up to that action? Simply because there was very general dissatisfaction at the way in which the fruit was being carried to England, and with the object of trying to bring about an improvement. We held several conferences, and entered into correspondence with various firms.

216. What was the result of your action? The result, to begin with, was to despatch Mr. Wm. Shoobridge to Sydney to make an effort in conjunction with the Department of Agriculture in Sydney to carry out a series of experiments in regard to fruit shipments. These were carried out by Messrs. Hudson Bros., and the result was very satisfactory. The first experiments were carried out on lines suggested by Mr. Shoobridge. At a later period Messrs. Hudson Bros. kept fruit for four months in their cool storage, and turned it out in first-class condition. We next tried to get a vessel fitted up on that principle, but could not succeed, as the Council of Agriculture had not the money, and Government would not pay the cost.

217. What was the name of that system? I don't know that it had a name, but it was described in the Council of Agriculture Journals.

218. *By Captain Evans.*—That was the ammonia principle, was it not? Yes. They had a room something like this, which was insulated and made air-tight. There was a small box outside the room nearly the same height and about a foot square; there was a coil filled with brine, cooled by an ammonia machine. The air passed over the coil, entering the room at the bottom, and was drawn off at the surface by means of a fan. It was a simple process, and all the machinery was provided at a cost of about £300. When we enquired of Lund's Line, however, as to what it would cost to fit up a boat, they said it would cost from £2500 to £3000 to insulate the boat. The boat had no insulation at all, nor any cooling machinery. If we had been able to start with an insulated hold, the machinery would not have been expensive. So far as we were able to judge, we were of opinion that it would be a very effective system.

219. Have you any idea as to what the cost would be to make an experiment in a vessel which had an insulated hold and appliances? I can't say, but it would be nominal if she had the fans and machinery on board. It does not follow that you must have the box cooled by any particular process, so that it is provided that cold air goes in.

220. Was there any proposition made to companies having vessels with insulated holds? Yes, a proposition was made to the mail companies, but they said they would not make experiments at that time. It was a system somewhat like that adopted in some lines afterwards and carried out in some of the Aberdeen boats, but the cold air went in in a different way, being driven in through the shoot, and then drawn off by means of a fan. There was not so much care taken with the temperature as at Hudson Bros. At their store they could regulate the matter much better. So far as my observation is concerned, I am of opinion that the *Australasian*, the last of three boats of the Aberdeen Line that went from here, and which landed her fruit in first-class condition, was fitted with something like it. Her fruit was the record cargo landed in London. Unfortunately the ship was late, and owing to her late arrival the fruit brought low prices.

221. Her fruit was in good condition? In a superior condition to any landed yet.

222. What process was at work? As nearly as possible that process,—the cool air being sent in, and then drawn off by a fan. There were three boats of this line, the *Thermopylae*, the *Aberdeen*, and the *Australasian*. All three of these boats went home by the Cape. The *Thermopylae's* insulation was not so good as the others, and there was not any fan for drawing off the cold air. The captain said after the cargo was put in, that he could see what was required, and he said when he arrived at Melbourne he would see the captain of the *Aberdeen* and tell him what was required. When the *Aberdeen* came she had a fan

provided for carrying off the air from the hold and better insulation, but unfortunately for us the vessel met with bad weather between Albany and the Cape. She had her deck-houses smashed, and I think the fan was washed away. Her cargo was only a partial success. The *Thermopylae* was a complete failure. As the result of these two conversations with the captain and engineer, when the *Australasian* came along her hold was thoroughly insulated, the same as for carrying meat. It was different from the other two insulations. The *Aberdeen* was better than the *Thermopylae*, but the insulation of the *Australasian* was put in as for frozen meat. The hold was superior, and the fan was worked the whole way. The engineer had held a position in one of the mail boats, and he assured me there was nothing more absolutely certain than that the fruit would get home in good condition. It was unfortunate that the vessel did not get in in time. The next year circumstances prevented our getting the boats, chiefly through the action of the mail companies in reducing the freight. They held out a rebate of 3*d.* per case to all shipping by the mail boats only. That entirely prevented us from getting the boats in again.

223. Are you of opinion that had the system been continued similar to that in the *Australasian*, that the fruit would have been carried in good condition? I am. There would have been an improvement in it both in the machinery and the cool chamber. It is not for me to say that it could be improved on, because I am not an engineer or an expert. I think that improvement would follow if the boats could be induced to go direct from Hobart. With such a perishable article as fruit, the boats should go direct to London from here, either *via* the Cape or through the Canal; as it is, the boats are hanging about the Colonies for from ten days to a fortnight, and very probably the damage is done before they clear Australia.

224. Was any application made by the Council of Agriculture asking the Government to continue the experiment? The Government were asked to guarantee the freight, but they refused to do so.

225. If Government were asked to guarantee the freight now, would you recommend that the fruit should be sent by the mail companies boats or renew some such service as that by the *Aberdeen White Star* line? That is a difficult question, and my answer will be governed partly by my answer to the previous questions. I would not advise dealing with the mail companies. It is impossible for us to get the mail companies to take the fruit straight away from here; they would have to go to the other Colonies in order to carry out their mail contracts, and must make at least two more calls. With other boats, my belief is we would sooner get a solution of the difficulty. There is another reason: some of the mail-boats take a great deal of care with fruit, while others do not. The very fact that they carry some cargoes home well shows that all could be carried well if the same care were taken. The first consideration with the mail-boats is to keep contract time with the mails, and they must use their steam to make the boats go through the water, when, perhaps, it should be used on the refrigerating apparatus. Mails and passengers are the first consideration, the last is the cargo. One or two of the Port line of boats landed their cargo in good condition, and I can't see why they should not, if the holds are properly insulated, and a fan is used to draw off the foul air. These boats would be quite as regular as the mail-boats, but we could not expect it unless we arranged with one or two or three lines to get the fruit right away from here.

226. If Government were to guarantee the freights, and enter into contracts for the carriage of the fruit, would there be any difficulty in getting a good line of boats to make Hobart their last "port of call"? I don't think so.

227. About what rate of freight did they pay in the *Aberdeen* line? I think it was 3*s.* 9*d.* per case.

228. That is less than is paid now? At present it is 4*s.*,—in fact the charge is 4*s.* 3*d.* a case, but the shippers get a rebate of 3*d.* per case by the mail-boats if they ship entirely by the mail-boats. After that trial of the *Aberdeen* line I had offers from another line, and on putting it to certain people as to guaranteeing the freight, I was met with this answer:—"I have money here to guarantee the freight, but if I do it I will forfeit 30,000 threepences, as I have shipped 30,000 cases in mail-boats, therefore I don't feel inclined to guarantee the freight on outside boats."

229. That would not obtain, would it, if the arrangement was made in the beginning of the season? I fear there are not enough boats to take the fruit home.

230. Would there not be, if the Government would guarantee freight? That would be a different thing altogether. If the Government made the guarantee the boats would run in accordance with the Government warrants.

231. Would you recommend the Government to enter into such a guarantee? Undoubtedly, and until that is done we shall not have much improvement.

232. If that were done would it be necessary to have some system of examination of the apples before shipment? Most decidedly; although I think the bulk of the fruit that goes home, one year with another, is good fruit.

233. But as a matter of protection? Yes. I think the Government should guarantee the freight, and until we get that, and those boats to go straight from here, we shall have no improvement. Only on that condition would I recommend it. Until you get the boats to go straight home you will never have the trade on a sound footing.

234. Have you given any consideration to the mode of conveyance of fruit to Hobart? Yes; on the whole the mode of conveyance is good. On the railway there may be a little damage done, not because of any carelessness, but because the railway is the worst way of carrying fruit. All the stoppages, shunting, and so forth means knocking the fruit about very much. All fruit coming by water is carefully handled up to the time it goes on board the boats.

235. It has been stated in the Victorian Legislature, and also I think by the Minister of Agriculture, that nearly all Tasmanian fruit is wetted, and is in bad condition before it is put on the steamers: is that the case? I don't think so.

236. Is it usual to carry fruit on deck? Yes, it is frequently carried on deck.

237. In an ordinary trip, then, would it not be almost certain that the fruit would get wet? I have never seen it, except in one instance.

238. I speak of a sailing ketch? Oh, I have never seen it on a ketch.

239. And if wetted in the ketches what would be the result? The fruit would not benefit by it, but it would not do so much harm; it might cause heating in the hold afterwards if the temperature were not

kept down. When I say it would not do much harm, I have seen from 200 to 300 cases stacked up against a man's house in the Huon district for three or four months, exposed to all sorts of weather till the cases were black; the apples have been covered with moisture, but remained sound and crisp. In the ship's hold, if the temperature were allowed to rise it might lead to extraordinary heating.

240. If the paper packing were wetted, what would be the effect? It is all a question of allowing the temperature to rise; on the other hand it would be fatal to employ too much cold, as it would cause freezing around every apple. I think there is too much made of it. Whilst I have not travelled up or down in the ketches, I have seen very large quantities of the fruit on the wharves, and I have very seldom seen the fruit wet.

241. It was stated in Parliament here during a recent debate that a considerable quantity of the fruit sent to England was saturated with water before shipment: has that been your experience? It has very rarely occurred in my experience; I can say that with certainty.

242. Then, you would recommend the Government to enter into arrangements with a line of boats to sail direct from Hobart, and the Government to guarantee the freight? Yes, and if they do not do that you will not get the trade. Arrangements should also be made for a regular and certain delivery—I mean a regular delivery in regard to quantities. If you get one boat in one week, say with 9000 cases, and in another week one with 20,000 cases, the effect on the market is bad. That is what we get with the mail-boats. Being one day before or one day over time is not so bad as large and irregular quantities.

243. What do you recommend as to dealing with the fruit on arrival in England,—what steps would you be prepared to suggest? I don't know that I could give any advice on that. Anything I could say would be a mere expression of opinion. I know very little about the conditions on the other side.

244. Do you think it necessary to have an agent in England to deal with our apples and other produce? I think it is necessary to have a commercial agent in England, but I don't know that I would entrust him with the sale of the fruit.

245. I don't mean the sale, but to look after our interests generally, and to open new markets? Yes, on the same principle that the Danish Government employed special men to put their butter trade on a firm basis. That was a success in their case, and I don't see why it should not be the case here.

246. *By Capt. Evans.*—Although you can't give an opinion as to the handling of fruit in London, do you think it would be feasible or good, say on the arrival of 20,000 cases, do you think it would be practicable to have the fruit repacked, and that it would be to the advantage of the consignee? Well, I would think so in some cases. It would largely depend on the quantity of fruit that went home, and the quantity damaged. On one occasion Mr. Bartram, senior partner of J. Bartram & Son, of Melbourne, who are large shippers of produce, was in London when the fruit arrived, and he told me that he went down to see it, and he saw a man with a tomahawk lifting off the lids of the cases. This man stated that much of the fruit was bad, and would not fetch within 5s. a case of its value, owing to some bad fruit. Mr. Bartram said there were a few apples spotted with mildew, and he believed he could have had them repacked for an expenditure of about 4d. per case, and thus have saved the 5s. He took some of the apples which the man said would be bad in a week, and he kept them for six weeks, and they were perfectly sound all the time. What I understand you is, as to whether the fruit could be gone through before being handed to the brokers. That could be done if you could rent a store for a few months in the year, but then it might be a mile away, and extra handling would be expensive. It is all a matter of handling and carriage. We might do it here, but even here we could not always get a store handy.

247. Do you think, as a business man, that there is a possible chance of having the fruit repacked,—I mean having to repack the whole 20,000 cases. Do you think it would be advisable to have that fruit repacked with the chance of another cargo coming immediately on top of it, instead of having it sold on arrival on its merits? Do I understand you, that all shipments should be repacked?

248. No. I mean if a cargo arrived in bad order, would it be advisable to have it repacked rather than sell it on its merits? Yes, if practicable, I would have it repacked, if it could be done without too much expense. It might be too expensive, and then it would be better to sell at once. The difficulty we are under is this, that we can't tell, till it arrives, whether the fruit is in good or bad condition. If we had an agent in England he would see all this at once, and, knowing the state of the fruit and the state of the market, he would be able to decide whether it was wiser to repack or to sell at once. He would also be in a position to know whether the ship was responsible for the damage to the fruit, and if so, would at once make a claim on behalf of the Government. Under existing conditions, and in such circumstances, we don't know what to do. We may get advice from one and the other, but we never seem to know what causes the damage.

249. You said that Mr. W. E. Shoobridge was sent to Sydney in reference to an experiment made by Messrs. Hudson Brothers. Have you ever heard or known of that system having been tried on board ship? No.

250. You told the Chairman that the *Australasian* had carried fruit in good order, and that you had a chat with the man in charge. Did you not find a difference in the management of that machinery and the insulation? Did you not see any marked difference where the captain had more to say in the matter than the engineer? Yes, in the case of the *Thermopylae*, the captain had much more to say in the matter, the engineer did not take much interest. In the *Australasian* both the captain and the engineer were very much interested. The *Thermopylae* carried the fruit home in bad condition, but the *Aberdeen* was a partial failure, owing to bad weather, I think. In the case of the *Australasian*, the engineer seemed to understand the whole thing, and he had not the slightest doubt about success. We heard when the ship was here that the *Thermopylae* had arrived with her fruit in bad order, but the engineer of the *Australasian* said "there is no fear about this vessel, we will carry our fruit every time in good order." This man had been in the mail boats, and he knew their principle was not right. The *Australasian* did carry her fruit in good order; it was the best cargo ever landed in London.

251. *By Mr. Bird.*—What was the method—insulation? Yes, the hold was thoroughly insulated. It had been insulated for meat. I think, too, there was something in the shape of the hold: it was right in the fore part of the ship, and much narrower at the bottom. There was a passage along the bottom of

that hold through which the air was to be drawn. The hold was thoroughly insulated, and there was an effective fan driven by an engine.

252. Was that the only boat which, when it had the cold air introduced, had a fan to draw it off? No, the *Aberdeen* had a fan also, but she met with very bad weather between Albany and the Cape, and one or two of her deck-houses and the fan were swept away.

253. Do the P. & O. and the Orient boats not use fans? No, not to my knowledge.

254. And the *Australasian*, that had the fan, carried her fruit best? Yes. I believe the *Warrnambool* also carried her fruit well. She was at the wharf at the same time as the *Australasian*. I doubt whether she was insulated then. Her people were on board the *Australasian*, and saw what was being done, and I heard that when the *Warrnambool* got to Melbourne her hold was fitted up in a similar way to the *Australasian*. I believe that fruit arrived in good condition, but I am not sure. It went to Manchester. There were several sorts of apples on board, the softer sorts of fruit which it is not usual to send.

255. *By Captain Evans.*—From your remark just now you seem to be of opinion that where the engineer seemed to take an interest in the matter, and had the sole charge, the best results accrued therefrom? Undoubtedly. In the *Australasian* the engineer was a man without any frill; there was nothing of the swagger about him, but he took a real practical interest in it. The *Aberdeen's* engineer also was a good man.

256. In reply to the Chairman you said it was possible to get outside steamers if the Government were to contract with them. Are you aware how many companies there are available for contracting with Government should they desire to contract? I can't say for certain, but there are at least two. It would require either two or three companies to get the service. Two lines could give a ten days' service. I don't know so much about the Port and the Gulf lines as I do about the *Aberdeen* and the *Lund*. If four lines were to contract we might get a weekly service, and we could get them to run direct, but they would not do it unless they could get enough fruit.

257. If the Government could be successful in contracting with outside boats, is it possible that the mail companies would have sufficient interest to come in and run more fruit, and so glut the market, so as to be more disadvantageous to shippers? It is quite possible. The mail companies will not give up the fruit trade without a struggle, and we must look for a good deal of trouble.

258. If the Government were to guarantee the freight by any particular line of boats, would it have any effect on competition if one line or more?—do you think that then the growers would be able to give the mail companies sufficient fruit? That is practically in the hands of the London brokers. If the brokers would guarantee the freight, that competition would come.

259. If the London brokers came along with the mail boats, and suppose they were to say, "Now, shippers, you are disappointed, you have lost your best cake, we will guarantee the freight, and we will give 2s. or 2s. 6d. per case, besides the freight, to the growers," would you not have a hard state of things? Oh! yes, that is the difficulty we had with the *Aberdeen* boats that year. We could not get an open guarantee for them. The only thing is, that if the Government only guaranteed the freight the brokers might not step in. If the fruit was going elsewhere, then they would, but if the fruit was going to them by contract they would not. The point is, that when we come to deal with these things there are men on the other side who are making a few thousands a year out of it, and they would not give up without a struggle.

260. You know something about the mail companies, and you know they must study contract time and the passengers before they study the cargo they carry? Decidedly; they must keep contract time, and look after the passengers. Cargo is the last consideration.

261. You could not get those boats to come here, and then go to London direct? Oh, no; and until that is done we cannot have the trade in any but an unsatisfactory condition. It is a perishable trade, yet the boats are hanging about the Australian Colonies for weeks.

262. Suppose, then, this Committee prevail on the Government, or show the necessity for guaranteeing the freight for the shippers and growers, especially the growers, in what way could the Government guarantee freight to the growers? I think the Government should make the contracts with the steamships on behalf of the growers, so that a grower could get whatever space he wanted. He would make his application for space through the Department of Agriculture. When he got his space he should then be free to make arrangements with any agent to ship his fruit. It would be for him simply to hand over to the agent the space certificate from the Government. If any arrangement were made by which the space would be left in the hands of two or three people, then the grower would have to ship his fruit in any way the spaceholders wanted him to do it.

263. *By Mr. Bird.*—Then would not the Government want some guarantee from the grower as to supplying fruit? Yes, the grower would guarantee to send the fruit to the Government. The Government might be secured both by the agent and the grower. There would be no difficulty about it; it is the way in which the butter trade is carried on from Victoria to London. There is no reason why the fruit should not be sent in the same way here; over there the Government contracted for space for the butter, and the large dairyman took his space from the Government, named his agent, and they entered into a bond to fill the space.

264. *By Captain Evans.*—That is all right so far as the space is concerned; but as to financing, suppose the Treasurer of the day says, "I will pay the freight on the shipment," and two or three small growers don't send their fruit to the Government, how is he to be reimbursed; or if the fruit, say from five people, arrives in bad order, and they can't close in, how are you to get over that difficulty? The Treasurer would have a bond from the agent and the grower: they would give a bond to find the fruit and pay the freight.

265. Would that agent pay the freight? Yes. Suppose my firm entered into the business as agents for John Smith and John Brown, and we entered into a bond, the Government know Moore & Co. as agents, and they ask us to sign a guarantee to pay the freight. The Government would look to us to pay the freight in the first instance. Having signed the bond, if we don't pay it our credit suffers at once. If the growers did not pay us we would not take their business again.

266. Are there agents in Hobart who would undertake that responsibility? We would take it under the conditions I have mentioned, but under present arrangements we would not undertake it,—we would not touch the trade at all. It was suggested to me by my partner to buy fruit and send it home, but I have set my face against it till I know more about it on the other side. In regard to shipping fruit, we would ship on commission as forwarding agents, provided we could get the space, but we know that in the case of the mail companies it is no use applying, as all the space is taken by three firms, and we would have to take it up through them. If the Government took up the space for the grower we would ship for him if he wished it, or if he appointed us agents then the Government would look to us as agents first. If we found, from default of the grower, that we made a loss in one year, we would not do business for that man in another year.

267. But there would not be much risk would there, if Government paid the freight in the first instance? I don't think there would be any risk at all.

268. The Treasurer might want a co-operative company, what then? I don't think the growers would ever agree to such a company. I would like to point out that, in this matter, it would be impossible for the Government to deal with 200 or 300 growers. The Government would want the business concentrated, and it would practically be concentrated in the hands of ten or twelve agents, and the agents would do it. The difficulty at the present time is that two large firms in the place have got the whole of the space under contract with the mail companies for two or three years. They take the space, and the growers are compelled to ship through them, and to whomsoever they may direct. I want to leave the grower free to choose his own agent here, and his own man to ship to at the other end. A Government guarantee of freight would afford the grower that freedom, and there would be no chance of the Government being let in, for the Government would have a say as to the agents. When a grower applied for his space he would name his agent, but the Government would not be bound to accept that agent. They could refuse if they chose.

269. What would prevent an agent in Hobart applying to the Government for perhaps three parts of the space which they had available? They could not do it if they took it from the growers. A man could only do that by getting a lot of growers together and inducing them to name him as agent. If seventy growers were to name me as their agent, and I sent all the fruit, it would make no difference so long as the applications for space should come to the Government direct from the growers, each naming his agent. At the time we were getting fruit for the *Thermopylae* we had a form—which can be obtained now from the Council of Agriculture, and it is identical with that used in Victoria—on which a man applied for his space, and named his agent, and then they signed a guarantee for the freight.

270. Then, you practically shut out all shippers who are not growers? I shut them out to this extent, that if the whole of the space is taken up by the growers the agents don't get a show, that is, the man who speculates in space on his own account. If all the space is not taken up by growers then there is no objection. Suppose the steamer is not filled up, the Government could allot the unoccupied space amongst the agents who want to take it up. I emphasise this point about the growers, because there would be practically no necessity for the Government to step in and guarantee freight for the agents; they would take it up themselves; they do now. If the Government desire to assist the industry they may as well cover as large a number of people as they possibly can.

271. From your experience, and from what you have seen and heard, are you in favour of an experimental shipment simply to ascertain whether the fan system can be driven by electricity? I am in favour of any reasonable experiments being made, but if you asked me if I would find fruit for it in quantity I would say no. I can't say it is no good, because I know nothing about it. If a grower, I might not mind sending 10 or 20 cases, but I would not put a lot in it. I should not be surprised if the fruit were carried home in fine condition without insulation or cold air, but I would rather, for my own sake, have the temperature of the hold kept down by cold air, with a fan worked to draw it off.

272. If you could get an experimental shipment, say at 2s. 6d. per case at the outside, would it not be worth the risk? Yes, that is why I say I would help the experiment. I would not mind finding 10 or 20 cases.

273. *By Mr. Bradley.*—Do you recollect the year when a lot of fruit was sent to London in Baltic pine cases? Yes.

274. Were they regarded as successful or otherwise? I really could not say to what extent. I know the conclusion I came to was that soft wood was unsuitable and no improvement on our own cases. I can't say whether the fruit was better or worse than in our own. I have seen several reports from Covent Garden that our case is a suitable one.

275. Cases of stringy-bark or swamp gum you heard were the best? Yes, stringy-bark. I think every case should have a centre in it.

276. *By Captain Evans.*—What is your idea as to making any alteration in the standard case for apples? I don't see any necessity for it. There has been considerable correspondence in the papers about cases. There is a desire on the part of some people to have the law altered, and to have a particular square case made the standard case by Act of Parliament. All I can say is that I think Parliament would be going beyond its province to do more than they have done. All Parliament ought to do is to say that a fruit case shall be of so many cubic inches capacity, or that it should hold a certain weight. It would be wrong to define what shape a case shall be. You should have a certain number of cubic inches capacity, but it is absurd to expect that Parliament should legislate as to what shape the vessel is to be.

277. Would you be prepared as an agent to undertake the agency for any outside line of steamers? Yes, decidedly.

278. What is your opinion, as an experienced man, as to the failure of the trade to London at the present time? I think the whole thing is summed up in a few words—first, the boats that carry the fruit home have not got the fruit as their principal interest; secondly, that the boats in which the fruit is taken hang about the Colonies for ten days or a fortnight before they get away from Australian waters. I would emphasise this point—If we are to have the fruit waiting about in Australian waters for ten days, it would be better to leave it on the trees for that time. We have to pick it now before it is matured, to meet the

boats. We would do better with the fruit by leaving it hanging on the trees than lying in the hold of the ship. We read now that Victorian and Adelaide fruit brings better prices and is better fancied at home than Tasmanian. To begin with, they are earlier than we are, and their fruit is nearer maturity when picked and shipped; then they get quicker despatch than we do, and get their fruit in on the top of ours. We find that the greatest damage which occurs is to fruit at the bottom of the hold. Then we have no knowledge that the holds are ever cooled until the last fruit goes in at Adelaide. I know, for an absolute fact, that vessels which carry meat never think of putting meat into the chamber until the holds are cooled down. I don't know whether the mail boats do that for our fruit. I know that when the *Aberdeen* and *Australasian* were taking in fruit here, the hold was cooled down before the fruit was put in.

279. In talking of the butter question, and in reply to the Chairman, you said you were in favour of cool storage being supplied by Government for export purposes, but not for home consumption—that should be left to private enterprise? Yes.

280. The difficulty would be in financing. The Chairman put the question—"Would it not be possible to store butter till the winter came in, when we get better prices?" Is there no way of financing that by agents in the towns, who might willingly take the butter instead of sending it home? I know there are agents who would do so if the butter were placed in cool storage, and I may say that when I was at the Council of Agriculture I applied to the Hon. Wm. Crosby, as a capitalist, and asked if he would undertake it. He told me that he would be perfectly willing to go into it if he could see that the butter companies would provide sufficient butter, then he would finance over it. Of course if the Government were to do that they would want a central dépôt, and if they tried it at Hobart the people would immediately want one at Launceston and another at Devonport and other places. It would be out of all reason to expect Government to have, say, three dépôts. If they had one they would have all the expense of bringing the butter to it or wherever wanted and taking it away again, and that would all add to the cost of it. There is a very small profit on butter, and if that were eaten up in any way it would make a great difference to the trade. We cannot do better with butter than export it when we have plenty, even if we have to import it again in the winter. A very small difference in the price of butter would make a difference in the price of milk, and so soon as it falls below $2\frac{1}{2}d.$ per gallon then the suppliers do not care to have anything to do with it.

281. I understand you went recently through Adelaide and Western Australia. What is your opinion as to the possible chances of opening a market for our fruits in those colonies? I don't think there is much chance. You cannot get them into South Australia because the duties are so high. When in West Australia I made all the enquiries I could with a view to doing more business if possible. I was one day at lunch with the Acting Premier, the Commissioner of Railways, and the Commissioner of Lands, and we discussed fruit-growing. I urged them to let Tasmanian fruit come in, and told them, if they did, I was certain they would get only clean fruit. My object was if I could have got any encouragement to make up a deputation to Government with the object of trying to get fruit in, but they set their faces dead against it; they said they were afraid of codling moth. I told them the codling moth was not a terrible evil here, and that we had districts where the moth had never appeared, and that I could guarantee we could send clean fruit from this country; but they would not listen to it. The fact of the matter is that a good many people are planting out orchards there; apples are $1s. 6d.$ per pound, and so long as they can keep them at that price they won't listen. As Secretary to the Council of Agriculture, I frequently applied to them, and on one occasion, when they had decided to let oranges in subsequent to dipping, I then tried for apples, but they would not listen to it; South Australia has also tried hard, but to no purpose.

282. Then you think there is no chance for our apples in Western Australia? There is no chance of their taking apples.

283. Do you think there is an outlet for potatoes and other produce from the North West Coast? Oh yes, that is all right. They take a large quantity at present, but the trade is peculiar, and you have to risk a large number of insolvencies. There are a large number of people from the different colonies who have failed in business or in billets, now in Western Australia, who write to our growers and induce them to send stuff along. In many instances the stuff is sent, and they then find they cannot do business, and are unable to take up the drafts. The banks go to the first one they can induce to take up the drafts, the consequence is that produce of all kinds is being placed on the market and sold under cost. When I was there oats were being sold at $3d.$ per bushel under cost. The North Western Farmer's Association, of which Mr. Littler is Manager, sent over a lot of potatoes and did rather well with them. They then chartered the *Dovedale*, one of the Adelaide Steam Shipping Co.'s boats, and when she got there the man who had them sent could not take up the drafts. They were handed to another firm, who, with great difficulty, sold them and just got clear.

284. Can you suggest any way of doing business there? Not till you find reliable men, or go and see for yourself. I find that the most satisfactory way in my own case. I have been asked to send produce over, but I have refused to send until I had been there and made enquiry. I think anyone who will rush into business like that, at the instigation of people they know nothing of, deserves to suffer. That principle guided me in refusing to go into the business of fruit trade. Before we could go into the trade, that is to buy and ship home, one member of the firm would go to England and make enquiries.

The Chairman thanked the witness, who withdrew.

At 4:15 the Committee adjourned until Wednesday, 9th instant, at 10:30 A.M.

WEDNESDAY, 8TH SEPTEMBER, 1897.

FREDERICK WM. JOHN MOORE, *further examined.*

285. *By Mr. Bradley.*—Is it necessary, in your opinion, to have a Commercial Agent in the office of the Agency-General in England? Yes, it is desirable to have a Commercial Agent in the office in England, who would work with the Agent-General, but not to be interfered with too much from here. The work I think that man could do, and could do very well, would be to look after every shipment of produce—apples particularly—that is sent from Tasmania, see it on arrival, and note its condition. He would receive from Tasmania advice as to the condition of the produce when shipped, and if he found it was in bad condition on arrival he would be empowered to make a claim on the ship if, in his opinion, the ship was responsible for damage. If he saw that the damage had been caused by any fault of the exporters or shippers in Tasmania, or the producers, he would at once advise with them on the subject. At the present time, taking fruit as an example, we are constantly fighting over the causes of damage, and nearly every man has different ideas. One man wants to say that the fruit is badly packed, but can't suggest any improvement in packing; others give different reasons, but when all is said, the grower here is like the old man and his donkey,—he tries to please everybody and can please nobody, and loses his fruit into the bargain. He does not know what to do with all the advice he gets. Then, much of the advice comes from persons who have an interest in the fruit in some way or other, and it is felt that much of what is said is not in the interests of the producer. If we had a man in England, he would be able to look after the interests of the producer. I can best explain what I mean by stating what was done in reference to the introduction of Danish butter. When the Danes first began to export butter to England there were all sorts of reports about it. Some reports said that the butter was rank, or it was badly packed, and various reports were circulated about it, but the Danish Government appointed a consulting dairy adviser to reside permanently in England. He had to see every shipment of butter arriving from Denmark, and if anything was wrong with the carriage he made a claim on the ship at once, and also made representations to the owners of the ship to provide improvements in the methods of carriage. If there was anything wrong with the butter which, in his opinion, was the fault of the shipper or maker, he at once reported it to Denmark, through the agency of the Department of Agriculture, and the maker was communicated with and asked to improve on that method of treatment, and if he did not know how to do it, he was advised as to the way by experts, and he was bound to do it. Another duty which the consulting dairy adviser in England had to perform was to take every step in his power to refute every false statement made respecting Danish butter. Just as we notice that in recent years injurious statements have been made respecting Australian butter and Australian meat, so were such statements made respecting Danish butter. The agent was supposed to write letters to the papers, and to point out that the fault, if any, did not lie with Denmark, and to bring prominently before the buyers that it was not the fault of the Danes, on every opportunity. It was also his duty, when opportunity offered, to go about the provinces and introduce Danish butter to the provincial butter sellers. Before the agent went there the provincial purchasers bought their butter in London, the same as the fruit dealers now have to go to Covent Garden to buy fruit. The result of this man introducing the butter was that the provincial buyers now cable to Copenhagen direct, and have nothing to do with London or Hull. It has practically led to the fixing of the price of the butter in Copenhagen, and it is the same to any of the provincial buyers, who either buy from the agency or send their orders direct. In that way Danish butter has advanced to the premier position in England, and it is worth shillings more per hundredweight than any other. If we had an agent like that and left him to himself, not attempting to direct him from here, good would result. He would of course have to feel his way about, and it might be two or three years before he would be able to justify his existence, but it would prove right in the end. Take our timbers: if we had a man like that, how much he might be able to do for us in pushing the timber trade. Under present circumstances we don't know even how to send timber to England. We have no one to advise, and we don't know as to whether we ought to send one kind of timber in preference to another. If we had some one there constantly making enquiries, and working with the different Vestries and Corporations putting down wood-paving, for instance, that man would be able to get a good many orders for us.

286. From your observation—although you have not been in London—but as a member of the press and a commercial man, I gather that you think it is almost impossible to push the sale of any of our products without the aid of a proper good all-round commercial man? I certainly do think so.

287. Does that apply to everything, or does it apply more particularly to such products as fruit, butter, bacon, and timber? Yes, it applies to everything that we now send, and also to other things. If we had such a man at home he would in the course of a few years be able to extend business to other products which are now not thought anything of. A man whose duty it was to be on the look-out would find out certain things were being used, and would enquire whether we could supply them. We can't say at the present time what he might propose. Take, for instance, fibre plants for paper-making: we have large areas here with saghs growing all over them, thousands of acres of it; pull one of these rushes and you will find it is composed of a very strong fibre. I believe a man such as I have spoken of would get into conversation with the manufacturers of paper, he would see the class of raw material they were using, and would be able to send to us and say "send along a few bales of your saghs and I will get it tried." We might possibly open up in this way a new export product. I think the man who would go from here should have a good all-round knowledge of Tasmanian products, and also should have commercial knowledge, and he should work to the Agent-General. I take it you will always want an Agent-General to attend to other matters, the floating of loans and so forth. You are not likely to get a man as Agent-General who would cover all these requirements.

288. Are you quite satisfied that what applied to the butter trade of Denmark would also apply to Tasmania? Yes, I am certain of it. We have no opportunity now of knowing so much as we should do of the trade of Great Britain.

289. You have noticed that very great good resulted to New South Wales and Western Australia through having travelling agents in the old countries of Europe, and that strengthens your opinion as to the great necessity for having general agents in London? Yes, I think so. Take the Western Australian.

Jarrah trade; although there is a powerful syndicate connected with that Jarrah trade—several of the people being connected with large companies at home, and they help a good deal—still there are lots of places on the continent where there are great openings for our timber, if it were properly represented. An agent, such as that of whom I speak, should be provided by Government with some hundreds of pounds worth of timber, or more, for samples, which he could give the authorities to put down. Make a present of it to them to try, and so bring the timber under notice in that way.

290. There are country districts of which you no doubt have knowledge, with regard to the growing of pigs and the curing of bacon. In your opinion, do you think the farmers here could, if they gave their minds to it, grow pigs to a greater extent than they now do? Yes.

291. For the purpose of curing bacon for local consumption and export? Undoubtedly. The only thing is that the export of bacon would be governed by the price ruling. If they could get 3*d.* per pound all round for pork, that is, in the carcase, I am quite certain that on the North-West coast, in particular, they should be able to turn out hundreds of thousands of pigs.

292. *By the Chairman.*—Are there not other parts also where pigs can be grown? Oh yes, there is Bream Creek, for instance. Look at the pigs sometimes taken to the Sorell sales. They could add very much to that. It is the same thing over in Tunnack and away in the North East districts, and of course at Ringarooma and Scottsdale.

293. Then you think our farmers can grow pigs as well as they can in other Colonies? Most undoubtedly.

294. That being so, as we have the area of land that could grow hundreds of thousands of pigs, why do they not grow them now they could get good prices? Yes, they are getting 5½*d.* to 5½*d.* per lb. now for pork.

295. That shows that it is not the fault of the price? No. I know that at Sorell it was 5½*d.* per lb. very recently, but of course that is not all the year round. If a man can get an average price of 3*d.* per lb. it should pay well, and production would be very much increased.

296. What, in your opinion, is the best class of pig a farmer should grow to make bacon for export? Well, I think a cross between the Tamworth and the Berkshire.

297. You were in West Australia lately; did you hear anything there about Tasmanian bacon? Yes, I know as a matter of fact that much of the bacon made on the North West Coast at the factories there goes straight away to Western Australia, but it goes through Melbourne houses. There are two factories there, one at Emu Bay, and the other at Table Cape.

298. Did you hear of the success of Tasmanian bacon as suitable to the climate? Well, when it gets there it is not known as Tasmanian bacon, it is known as Victorian, like the butter. Melbourne houses buy butter here, and when it gets to England it is known as Victorian butter.

299. Did you hear, when in West Australia, that Tasmanian bacon was very good? You can't hear of it at all, because it goes in as Victorian bacon; you don't hear of it as Tasmanian bacon at all.

300. In your opinion it should be ratified as Tasmanian bacon—I believe it stands the heat of the climate splendidly? It can only be ratified by a direct export trade. If the bacon curer here sells to a Victorian merchant, he has no control over it afterwards, and the buyer can call it what he pleases. I certainly think everything we export here should have a Tasmanian brand on it.

301. *By the Chairman.*—Do you think there is room for an export trade for bacon from Tasmania? Well, I doubt if we could export to England; of course in the Colony of Western Australia there is a market. We can't export to England at a price. I believe there is more to be done here in the export of frozen pork. There is less handling needed, and with it a good export trade might be established if pigs were grown of the proper weight, say from 80 to 120 lbs. at most; there is always an excellent market for these in England.

302. *By Capt. Evans.*—As an agent, have you done anything so far in reference to the fruit question for next season? No, nothing whatever.

303. Are you aware of anything having been done by other agents? I have not heard of anything.

304. *By the Chairman.*—You have had an opportunity of reading your evidence in proof; is there anything you would like to add, if so, we should be glad to receive it? Yes, I would like to give a short sketch of my views as to the constitution of the Department of Agriculture.

(The Chairman said the Committee would be glad to receive it.)

305. *By Mr. Woolnough.*—Can you suggest any plan by which, in your opinion, the producers can be helped to associate together in order to obtain the best of bacon curing—that is, a manufacture which ought to be profitable to the producer. Can you suggest any method by which the producer could be properly assisted to obtain a better profit? Yes, by the State assisting, where necessary, to provide plant and buildings at the outset. This is the reason. Suppose a company formed to handle pork in this way. The producer is called on to take a certain number of shares. He can't stand alone if his money, or his means of getting money, are used in this way, because he at once wants to increase his capacity for supplying the factory. He must breed more pigs, buy more pigs, and provide more fodder, and when he is asked to provide share capital for the company, he finds he can much more profitably use the money in supplying pork to the factory.

306. Would there be any risk to the Government in finding money for this purpose? Not if they were to safeguard themselves as they do in Queensland under the Meat Export and Dairy Produce Encouragement Act. I will give an instance: suppose the residents of Sorell joined with Bream Creek and the Peninsula, and would like to go in for a factory, the Government would say, "Well, if you like to form a company amongst yourselves, and so many of the farmers around take up, as soon as practicable, a certain number of shares each, we will advance up to, say £2000, for whatever plant and buildings your business needs and which you erect, we holding the property and buildings as security, and on all the pigs and bacon sold one-eighth of a penny, or a quarter, or a half per pound, as the case may be, shall be set aside to pay back the money that is advanced, with interest. If that security is not good enough, considering that these factories are to benefit the district, you must raise a fund by a tax of so much per head on the pigs of the district, or you might carry it further, as they do in Queensland, by a tax on cattle and sheep, and extend the assistance to handling beef and mutton."

307. Are you aware whether in Victoria or elsewhere private parties have taken in hand the establishment of such bacon factories? I can't give special instances, but it has been done, I understand, by financial institutions and also by capitalists. Here we have no capitalists who will do that sort of thing. The Commercial Bank assisted a Butter Factory here, which is doing well.

308. Do you think the producers have sufficient knowledge, if they choose to use it, about associated bacon-curing,—could the Council of Agriculture afford more information as to the way of forming companies if they had the will? I don't think they have the information.

309. How could they best obtain it? By having an expert for the purpose, as in other countries. Other colonies are in a better state than us in that matter; if you go and see the bacon coming into Melbourne you would find this. New South Wales is not so good; Queensland is better, so also is New Zealand. The average samples of bacon coming into Melbourne are better than that in Tasmania. Queensland brought in a special man at a cost of £1000 a year for salary alone to instruct the farmers; he was brought from America.

310. How do you think the services of an expert would be best utilised in the way of informing the farmer? Just as we did with the travelling dairy, and that improved the butter, I think.

311. Yes, but you can't have a travelling bacon factory as you can a travelling dairy? Yes; you can have the man and send him round to give practical information to the farmers.

312. Without the expert, who would be expensive, what in your opinion would be the value of information given through the paper published by the Council of Agriculture—could not that organ give more practical information than it now does, with a view to induce co-operation amongst farmers? Do you mean more knowledge of co-operating?

313. No, but could it not give them a better knowledge of the way of co-operating and of curing bacon than they have now? If the farmers would form a co-operative company they would at once have an expert man to do their own work.

314. The knowledge of the expert could be put in writing in the paper, could it not,—that is, the knowledge that the pig-growers have not got, could they not get it by newspaper writing? It has been so given. When I was Secretary to the Council of Agriculture I collected a lot of valuable information and published it in the *Gazette*. Some approved of it, but you can't give knowledge in that way as you can by practical demonstration. For one thing you can't depend upon people reading it, but practical demonstration would be attended to.

315. Then you think that the Council of Agriculture could do nothing more by printing, but that practical demonstration would be better? Yes. The articles published are picked up here and there, and one may give one way of bacon-curing and another a different means altogether, and the farmer is confused. If we had an expert he would try the new systems and show how far they were an improvement, or the opposite, and this he would do by practical demonstration or advice. The agricultural press gives a great deal of useful information, but there is this difficulty, one paper advises one thing and another something else. To give an instance which came about in regard to butter. It is twenty years ago since the proprietors of the *Argus* and *Australasian* sent a special man to America to go through all the large butter factories there, and to report on some of the best methods adopted in the manufacture of butter and cheese. These articles all appeared in the *Australasian*, but there was no single place in Victoria where anything was done in consequence of them. In New South Wales, however, through the assistance of the late Mr. T. S. Mort, these articles were taken up, and they set to work to establish co-operative companies and to work on the modern system. Some years afterwards the *Australasian* paper again sent the man who had been through America through the districts in New South Wales where modern dairying was being so successfully carried on, but the Victorians did not take it up then. The Department of Agriculture in Victoria then sent an experienced officer, the Secretary (Mr. Martin), to go through New South Wales to see what was being done, and he recommended the travelling dairy. That is how the Victorian industry came to be as it is, though of course it has been fostered by bonuses. That is how they went to work. Of course if you keep on, just as the continual dropping of water will wear away stone, results may be realised in time, but it will be long before any results can be expected from newspapers or special publications. Only a few take it up, but if you can give special demonstrations by having a man whose duty it is to go through the districts and lecture on the subject and show how it can be done practically, then results will follow.

316. Do you know anything about the fishing industry? No, I do not.

317. Of the different methods of disposing of apples, which do you consider most profitable to the producer,—to sell out direct to the shipper, or to consign to the shipper or to a fruit broker, without cost, the producer taking the risk; or to obtain orders from England for the fruit? There are three methods of fruit disposal: to sell outright to the different shippers, when the risk is theirs; or to take the risk yourself, simply using the shipper as an agent; and the other is to get, if you can get, orders for fruit from England.

318. Have you any experience as to which method is the best? So long as the present unsatisfactory circumstances exist, I think if the purchaser was to sell here at the best price he can get it would be best. If he can get orders from England through reliable men he might take them. Last of all, I consider, if I were a producer, I would not consign a single case under present conditions. I think the producer is too poor to take the risk. If the Government were to step in and solve the difficulty of carriage, and also assist by having an agent at home, I think it would be more beneficial for the producer if he were to consign.

319. *By the Chairman.*—When you were at the Council of Agriculture, did you make any experiment with a shipment of potatoes? No; but I have sent some since to South Africa, and they arrived in good condition, but they arrived late. Some were sent from Victoria in bags, but they arrived rotten. I had mine packed carefully in apple cases.

320. What price did they realise? I don't know; it was an order. They had to go about a thousand miles beyond Cape Town. They were seed potatoes.

HENRY JONES, *called and examined.*

321. *By the Chairman.*—What is your name? Henry Jones.

322. Do you know the object of this enquiry? I know a little; I don't know very much of it.

323. Have you had any experience with respect to the shipment of fruit? Yes, a little within the last few years.

324. How long? I have been connected with the trade for the last ten years.

325. Have you had practical experience of the shipment of apples to England? Yes, I have had a little to do with it since I commenced.

326. Have the results been satisfactory to the shippers of produce? I don't think they have, right through; one year they get a good profit, in another year a low one.

327. In what condition is the trade now? It is rather run out, I think; speculators have had a bit of a loss, and they want to see something more than that. We want to see more in it.

328. What do you mean by speculators? I mean ourselves, for instance.

329. You mean you have made advances, and lost? Yes.

330. What advances do you make? Well, last year we advanced to the grower the value of the fruit on the wharf up to as much as 3s. 6d. per case.

331. And did you also pay the freight and charges? Yes; we drew on London against the fruit, if there was a man appointed in London representing the grower.

332. And what was the result? Well, we lost £200 on one transaction alone. In that case the grower got advances from the London agent as well. We advanced the man £1200 before the shipment came here, and he also got advances from the London agent. The fruit paid us back all but £200; the London man lost £400.

333. How do you account for the loss? Well, I think it was bad carriage. Of course, I have no proof. The agent said it was bad carriage; the steamboat companies say it was not.

334. What was the condition of the fruit when it landed in England? I don't know. I have never been there. Mr. Shoobridge, who has been there, says there is always a large amount of bad fruit and wet fruit.

335. Does that give the agent a chance of saying that the fruit is bad? Yes; it gives them a chance of saying that it is all damaged.

336. Do you examine fruit on which you have made advances prior to the shipment? Yes, we do sometimes. We have a man on the wharf for that purpose.

337. And how is the fruit shipped generally—in what condition? In fair condition.

338. You say you examine the fruit? We have a man on the wharf to examine it.

339. And you think the fruit, when shipped, is in good condition? Yes, it was last year.

340. If it could be landed in that condition, what would be the value of the fruit on the market—would it pay the grower? That would depend on circumstances; very likely it would pay the grower well. It does not want £1 a case to pay; it wants only 8s. 6d., and that would pay the grower well.

341. What would you consider a fairly remunerative price to the producer when he gets his fruit to England? 8s. 6d. per case. If they get 3s. 3d., that means that the fruit will pay them.

342. As a rule, has fruit realised an average of 8s. 6d. per case? No, not on the average—an average of 7s., I should think.

343. Have you any knowledge of the reasons for the low rates ruling? Well, letters have passed between our office and the mail companies on that subject. The brokers say that the fruit was damaged and would not sell, that it was condemned on the market, and all that: the mail companies say it was not condemned, and that it was all right.

344. And you have no means of getting an independent opinion between the two? We have not; that has been the case for the last two or three years. The brokers say the fruit was damaged to cover themselves, the mail companies say it was not damaged.

345. Do you think the fruit is landed in good condition? No, in bad. The *Ballaarat* landed her fruit badly; she was the last boat of the season.

346. Do you think the present system of carriage is satisfactory? No, that is not my experience. The large boats seem to have so many cases wet or frozen, or something.

347. Have you made any tests of any other system of carriage? Yes; we had the *Thermopylae* here. She went with an experimental shipment on a new plan—ventilation, I think. The result was that all the fruit was lost. The shippers all lost their fruit.

348. You know the test that was made by the *Australasian*? I don't think any test was made at all; the fruit was just carried in the ordinary way, the same as it is carried in the mail boats.

349. Was there not a fan, driven by steam, used? No more than the mail companies use in their boats. All the mail companies have fitted up fans in the bottom of their boats.

350. Did you ship in the *Australasian*? No. Some of my customers did.

351. You know that the result of that shipment was satisfactory? I would not like to say. It was a smaller shipment, and there have been others as good. I doubt whether the fruit was landed in any better condition than by other boats. I don't believe it was; not a bit.

352. Can you suggest any mode of improving the present system of shipping and carriage? I cannot say that I could. I think if I attempted suggestions I might suggest something that would land you in as bad a muddle as you already are. I think if there was a person in England who would take charge of the shipments when they arrive,—that is, if the mail companies would allow them to do it,—there might be some good done, or, if the Government advanced the freight to the growers and gave them a free hand to distribute the fruit where they liked, there might be an advantage; but this is all speculative.

353. Do you think, then, it would be an advantage to have a reliable independent agent in England? Certainly. I think it would be a good thing if the mail companies would allow him to act.

354. At present you have no means of knowing how the fruit arrives? Not the slightest. The companies say that it is landed all right, the brokers say it is not, and it is said that the brokers run down prices to suit themselves, instead of merely selling on commission.

355. Do the mail companies take any steps to examine the fruit on arrival? I could not say whether they do. It is all a speculation.

356. As a fact, the fruit is carried straight from the ship to Covent Garden? Yes, I believe that is right.

357. Then the mail companies would not know how or in what condition the fruit was landed? No, they could not, unless they had someone in the docks to examine the fruit before leaving the dock.

358. Would you recommend the Government guaranteeing the freight? Yes; I think they might. We would not want our freight guaranteed, but the small farmers and producers would have to go and get advances from somewhere. Whatever was advanced the growers would have to leave the fruit to us. We would not advance to the grower and let him send his fruit to whom he liked, and trust to him to pay; he would have to consign to our brokers.

359. You would not do that? No; we would want a lien on the bill of lading, and the agents would have to pay before they got the fruit.

360. If the Government guaranteed the freight, would it be necessary, in your opinion, to have an examination before the shipment of the fruit? I think it would be better to have a man to examine the fruit.

361. You do examine the fruit, don't you? Yes, to satisfy ourselves it is all right.

362. Would you guarantee freight, as a business man, without having the right to open any cases you desired to examine? Certainly not.

363. Would that not be a reasonable position for the Government to take up? Certainly.

364. Do you think shippers would object to examination if the freight were guaranteed? I should think not; it is a matter of opinion. What they object to in examining fruit is this—they send, say to Sydney, 2000 or 3000 cases. It is dumped down on the wharf for shipment from different people. If you commenced to open the cases you might keep the boat two or three days while you were doing it. Of course if you guarantee the freight you have a right to see the fruit, so as to ascertain whether it is worth paying freight for.

365. Then if the Government guaranteed the freight would it be advisable for them to have an agent in London to see how the fruit was landed from the mail companies' ships? Certainly; if the mail companies would allow the agent to examine the fruit at the docks. If they took it first to Covent Garden and then told him to examine two or three days afterwards, it would be no use; it would only lead to disputes as to whether the fruit was damaged on the ship or in the market. If the agent could examine the fruit on the wharf, before it leaves the ship's side, where cases were found damaged he might then enter a claim, and could show the fruit was damaged before leaving the docks. That would give the mail companies a chance to come down and protect themselves, and it would be an advantage all round.

366. Would a commercial agency be of advantage to the trade? Well, it could do no harm, and I think would be bound to do some good.

367. Do you think the present system of exporting fruit to England will be continued if nothing is done to improve it? Yes, but on a smaller scale.

368. Do you think it will be continued to any extent? We send about 120,000 cases a year at the present time, all we can get at a price. The growers have lately begun to save for Sydney and the colonial markets, and we sometimes can't get serviceable fruit unless we pay a great price. We export a considerable quantity of apples, but not one grower out of three will sell or ship to London at his own risk; they prefer to keep them back for the colonial markets.

369. Do you think an uncertain time for shipment has to do with it? I should think so, but the growers won't sell and won't ship.

370. Do you think the growers would ship if there was a reasonable guarantee of the fruit being landed in good condition? That would depend on the returns. If the fruit was landed in good condition and brought a low price, the grower would not ship any more.

371. If the fruit was badly landed, what chance would there be of getting a good price? Some people don't send us any information at all as to the condition of the fruit. They merely send us the account-sale, which says that the price realised was 2s. or 3s. a case—or whatever it may be.

372. It has been reported that the fruit was landed in bad condition this year? Yes, that is reported by the brokers.

373. If you deal with the London market you would hope to realise a payable price if the fruit were landed in good condition, would you not? What some might think good. The fruit landed by the *Ballaarat* last year did not cover the freight and dock charges.

374. Do you think it likely the producers or growers will continue shipping with such low prices? Yes, but on a smaller scale. We might speculate in 20,000 or 30,000 cases. There is one thing, they should carry better with a few. It is those big holds that carry the fruit badly, I think.

375. Have you gone into the conditions of shipment? Yes, with the mail companies, sometimes, but it led to nothing satisfactory.

376. Do the companies contend that the fruit is carried in good condition? Yes, they don't admit any damage on their part.

377. Is it not a fact that the fruit is damaged in transmission? I should think so. I believe it is damaged all right.

378. Is there any other means of carrying fruit—I mean by other boats with which the Government might enter into contracts apart from the mail companies? I could not say that exactly. If they could get the companies to come and give better terms, for instance—Do you mean for the Government to take a contract, say for 60,000 or 70,000 cases for people on the same lines as the mail company? [*Chairman*: Yes.] No, I don't think so. That would fetch opposition into the business, and do little good. The outside companies will take and damage your fruit, and then, when you make a claim, they won't recognise anything.

379. You know that experiments were made with three outside boats? Yes, and they told the growers they had a new system that would carry the fruit, and they were worse than the mail companies. They damaged the fruit badly.

380. In what way? Well, there was the *Thermopylæ*; she charged high freights. We wanted to get other steamers, and the Council of Agriculture got her here, and Captain Evans was the agent. They contracted to carry the fruit at a temperature not over 60°, and the fruit was put on the boat on those conditions. On their own showing, as certified by the captain, they carried it at 81° and spoilt it all, and we could get nothing back from them unless we went to law with them. The *Thermopylæ* ruined all the fruit, and would not give the growers a farthing back.

381. But if the Government entered into a contract of that kind could it not insist on the guarantee being fulfilled? I don't think so. I don't think the companies would enter into any guarantee to land the fruit in good condition. If you could get them to do that it might be all right.

382. If they gave a guarantee as to the degree of temperature and they were to violate it, do you think they could treat the Government in that way? Well, I don't know how you are to get at it unless you were to have self-registering thermometers. There would have to be something like that or you could not prove your case. If they guaranteed to carry at a certain temperature and you were to take the captain's log, for instance. If they carried 20,000 cases of fruit there would be about £10,000 involved, and if the temperature went down he would take good care not to register it. They would not give you evidence to convict themselves.

383. Is there any way you could suggest? No, only by having an agent in London to receive the fruit.

384. You would recommend that? Oh yes, certainly.

385. *By Captain Evans.*—You mentioned, in reply to a question by the Chairman, that you advanced £1200 on fruit and lost £200, and that £400 was lost by the parties in London, who also advanced. How many cases did that mean? Eight thousand.

386. Distributed amongst the whole of the boats? Yes.

387. You told the Chairman distinctly that it was not in your power to say whether the fruit was damaged by the boats or whether the loss was the result of bad sales in London? Not at all. I said we could give no proof whether the fruit was sold at a good price and a bad account sale made out, or whether it was damaged by the boats, or what.

388. But you would have an account sale from the brokers showing that several hundreds of cases were worthless or damaged would you not? Yes, that is right.

389. And if the fruit was damaged it might have been landed in bad order? Yes.

390. You talk about advances to some growers—could not the grower, if he wished it, have had advances from brokers in London? Yes, up to 2s. or 2s. 6d. per case.

291. In addition to the freight? Oh, yes.

392. When you told the Chairman that 8s. 6d. a case in London was enough to return to the grower here from 3s. 3d. to 3s. 6d. profit? Yes, that is about it.

393. Then, perhaps you will tell the Committee what you put down as the expenses upon a case of fruit, from the time it is shipped here till after it is sold? Yes: take the expenses from the Dunn-street pier, the freight to London would be 4s., the shipping expenses 6d., the selling charges in London would be 6d., and the dock charges with a special charge of 3d. a case made by Edward Jacobs & Sons, would be 9d., that is, a total of 5s. 6d. a case. If the fruit sells for 8s. 6d. there would be 3s. profit. There has been a case this year where the freight has been only 3s. 6d., so that there is an extra 6d. profit straight away. Then some of the brokers in London only charge 6d. for dock charges. Jacobs' people charge 9d., the 3d. being for sorting out. That is an extra expense.

394. Are you positive that is the whole of the expenses charged against a case of fruit sent to England? Yes.

395. Will you tell the Committee as to what system of ventilation was in use in the case of the fruit carried by an outside boat? No, I can't; Mr. Moore could tell you that. They sent him over to oversee the shipment when it left Melbourne. He ought to know what was the nature of the machinery used to do the work.

396. But you have an idea of the system, although you may not have seen it? I believe they do it by fans and the ordinary atmosphere circulating through the hold.

397. Do you know if the fans were there? No, I don't. I know that Mr. Moore said they were there, and I would not doubt it. I don't know that it ever cropped up that they were not there. I took it for granted they were there.

398. If anyone told you that there were no fans at all, but only ventilators, would you believe it? Yes, I would believe it. If they were not there I don't know whose fault it was.

399. You said that in the case of the shipments made afterwards by the *Australasian*, the *Thermopylæ*, and the *Aberdeen* that they had treated the shippers worse than the mail boats did? Yes, that is my opinion.

400. Take the *Australasian* and the *Aberdeen*. In your opinion, was there not some other mode used for helping the carriage of that fruit not used on the mail companies' boats? No, I don't think there was.

401. Well, from your experience in visiting the mail boats and watching their proceedings, will you tell the Committee if you know of a fan, worked by a separate engine, on board any one of those boats, independent of the refrigeration? I can tell you what I have seen on the mail boats, and that was a fan; and three fans were experimented on. I went down the mail companies' boats every season, and I have seen a sort of trunk in the bottom, of about six inches square, and a hose for the air to go in underneath; and they explained that they had pumps for drawing the air out of the shoots, and drawing the air by a fan from the bottom of the hold.

402. Are you not aware that they had a special fan in connection with these shipments, driven by a special engine, outside of the machinery used in the mail boats? No, I am not aware.

403. But you would not contradict it? No; I know that the fruit was carried very badly.

404. Was that not in the *Thermopylæ* and the *Aberdeen*, not in the *Australasian*? That I could not say.

405. Had you not communications from England that the freight in the *Australasian* was carried well? Yes; I think we got it through the papers first, not through the brokers; we got it through the press if I am not mistaken, and then we got it from the agents of that particular company.

406. You told the Chairman, referring to the *Australasian's* cargo, that the price realised was such as to warrant the idea that the fruit was not carried well, or that it was not extra good? Yes.

407. Was that not due to the shipment being too late in the season? Yes, that might have had something to do with it.

408. Was that not mentioned by the brokers in their returns? Yes, I think there was something in that. If the shipment had been earlier in the season it would have had a better chance of fetching good prices.

409. What freight do you pay the mail companies? 4s. 3d. per case.

410. Was it not 4s. 6d. a case? It might have been; it was reduced.

411. Through these boats coming in? Then it was 4s. 6d.

412. What did the outside boats carry for? 3d. underneath the mail companies.

413. Think again—was it not 6d. underneath? When the mail companies carried for 4s. 6d. the other companies carried for 4s.; then the mail companies carried for 4s. 3d.

414. What was the freight charged by the outside boats? I think 4s., was it not?

415. No, 3s. 9d. was it not? Yes, there I made a mistake, it was 3s. 9d.

416. Suppose the Government contracted with any steamers outside the mail boats whereby they could get a sufficient guarantee that the boats would come along and carry the fruit regularly and in good order, at a reduced price, is there anything to prevent the growers and agents in Hobart helping the Government? Nothing to prevent the growers, but the shippers, by whom I mean Messrs. Peacock, Knight and Co., and Jones and Co., could not ship by other than the mail boats for two years more.

417. Have you any objection to tell the Committee why you could not ship with other boats before that time? No. We could not ship with any other company but the mail companies for two years.

418. Do you object to tell why? No. We have undertaken to ship by the mail companies' boats only for four years if they reduced the freight to 4s. a case, that is 4s. 3d. with a 3d. rebate, if we guaranteed to ship for four years.

419. Are you not aware that some large growers send in this way, independent of the shipping agents? I don't know that it would affect them if they did ship by the other company. We would forfeit the rebate. You must contract to ship with the mail companies for four years to get the rebate of 3d. per case. We are morally and legally bound to ship with them for two years more, as we have collected the rebate. If it came to a point of law, we should be bound to ship with the mail companies for that period.

420. You told the Chairman that it would not interfere very much with the trade if the growers hung back with their fruit for the Sydney market—that would not interfere very much with the producers? It would affect the producers, of course. The producer now hangs back in many cases. He will neither ship nor sell for the London market. If there were no fruit shipped to London, it would affect the Sydney market very much: yet they will not sell for the London market at a reasonable price,—they would rather keep back the fruit for the colonies.

421. Suppose the growers this season would not ship the usual quantity to London, would it not seriously interfere with the colonial markets? For that season it would. They would find a bad market.

422. Are there not several kinds of apples which, if they did not send to London, would not sell at all? There are some would do for the colonial market, but ribstones and the earlier kinds would not. If sent to Sydney there would be no call for them.

423. The other markets, being so much earlier than ours, are glutted with their own stock, and cannot take our early apples, such as ribstones, Prince Alfred, Alfredstone, and others. You know from experience that, if sent to Sydney or Brisbane, these apples would realise almost nil to the growers? Yes, that is right.

424. Then, if they could not get them away to England what would be the result? Then the growers would suffer. The fact is they cannot see their own interest—they won't ship, and they won't sell at a reasonable price for the London market.

425. What is your opinion as to repacking fruit on arrival in London—are you of opinion it would be advisable, in the interests of the shipper, to repack the fruit or to sell it, on arrival, on its merits? Yes, I would repack if the fruit was known to be damaged, if not, sell at once. The fruit should only be repacked where it is damaged.

426. What would be the effect on the trade in London if it were known that nothing but good apples would be sold from Tasmania? It would help the market. If it were known it is bound to be good. You, as a private person, might go and give 10s. a case for it, but if it were known or suspected that it would be half rotten, you might only give 5s.

427. *By the Chairman.*—Are you of opinion that a small percentage of damaged apples would seriously affect the sale of the whole? I am of opinion that it gives the buyers a handle to complain, and seriously affects prices.

428. Do you think the buyers make use of that to their advantage? I can't say that. If there were complaints you would understand they might do so. Mr. Thos. Walker wrote that 100 cases of apples were returned after a deposit had been paid. They brought the fruit, left it in the place, and said "there are your apples, we will forfeit the deposit." Other people took the apples to the country by train, and no doubt the broker would put a claim in for damaged fruit.

429. *By Captain Evans.*—You told the Chairman that the outside boats treated the growers worse than the mail boats? Well, I mean they were just as bad.

430. But you said worse? If I said worse I might have to prove it. I know that when the *Aberdeen* took the fruit home they made a promise that they would have improved machinery, but the fruit was ruined, and when they would not refund any of the freight I think it was very bad, and I may say worse than the mail boats.

431. Have not the mail companies damaged cases of fruit too? They have not been so bad.

432. Has not the fruit arrived in bad condition by the mail boats? Yes, I believe it has.

433. Have the mail companies given back any of the freight? No, but if the mail companies come, in the ordinary course of their trade, with nine or ten steamers and land the fruit mostly in good condition,

there is not the same cause for complaint as when another company comes in to improve the system, and sends three boats, all of which land their fruit damaged. These boats damaged three lots of fruit, and gave the growers nothing back on the freight. The *Thermopylae* was an experimental shipment, and her fruit was damaged; the other boats came in the next year and it was just the same; then another boat came and she did not damage her fruit.

434. I believe Lund's line sent a boat, did they not? Yes.

435. She landed her fruit in good condition? Yes, I believe so, but I am explaining that the mail companies send ten boats in the season, and out of these one may damage the fruit and the other nine land the fruit in good condition. In that case there is not the same cause for complaint as when another company comes in promising to improve the system, and with three boats damages all the fruit, and won't give any freight back. Then, I think, there is cause for complaint.

436. Did they say there was any improvement in their system? Yes; you said so yourself. You said there would be an improvement in the ventilation and with the fans, and that there would be lower freights and an improvement in the carriage.

437. You have already stated that for this year far more than one of the mail boats had damaged fruit. Not one in nine boats, but to a greater or less extent the fruit was damaged, not in one boat but in several. Have you claimed for return of freight? Yes; we put a claim in for £9000.

438. Do you think you will get it? I believe we shall. We put in the account sales to prove our loss. We never did that before; but we have put in a claim this year and hope to get some of it. If they don't meet us then we shall think the mail boats no better than the others.

439. You saw a statement in the press, and the statement was repeated in the House of Assembly, that fruit brought from the Huon in barges was landed on the wharf in a wet condition. From your ten years' experience can you conscientiously say you know this is otherwise? Yes. The fruit they say was wet was so only on the outside of the case, and when laid in the market it would fetch as good a price, or perhaps better, than the fruit that was in the hold. It was not damaged by water before it went into the hold.

440. Then, your experience is that barges or steamers do not land their fruit on the wharf in a wet condition? That is my experience. It might be that a few cases might get a little water over them, but few are really wet.

441. What is your opinion as to the agitation for a new case? Well, of course I have said it would be ridiculous for the Government to force people to send their fruit in a particular case. That should be regulated by the value of the case to a man in the London market. Not any particular case I should say. I don't think there is anything in the new case that the Government should say you must send your fruit in it.

442. Should we force it on the grower that he should ship in these cases, and no other? No; certainly not. There is a method for an improved case that the Messrs. Shoobridge sent through us.

443. *By the Chairman.*—Do you know of any improved mode of carrying fruit? Only one, and we are making the experiment. It is an improved method of carrying the fruit to London. Instead of being frozen, the air goes into the vessel at a reduced temperature of the atmosphere. It goes into the hold in such a way that no snow or ice gets into the fruit. It will go to London, and will be tried by engineers who know more about it than we do, and who will experiment with it in a small chamber, or something of that sort. But it is a mere experiment. In any case it is not safe to send too much fruit in one chamber.

444. Would you advise that the experiment of small shipments should be made from time to time? No, but if we could send say 5000 cases in an ordinary hold I believe it would carry all right with ordinary ventilation—not, of course, through the Red Sea, but round Cape Horn.

445. Is it your experience that shipments of large quantities are carried with difficulty? That is our experience.

446. And smaller shipments carry better? Yes. There should be a way of circulating air in the bottom of the ship.

447. If the temperature is kept even, which they can do, is there any reason why they should not carry the fruit home in good condition? No, not if the holds are properly ventilated. The mistake is when they let their temperature run up to say 70° and then reduce to 50° or 60°. Sometimes they let it go up to 80° and then reduce it down again, and if it is not watched it might go up to 100° or 90°. Then they go putting extra air into the passes, and it is so severe to bring the temperature down that it creates ice.

448. Does the fact that the vessels do not go from here to England direct have any effect? I don't think so.

449. *By Mr. Woollnough.*—How many cases did you ship last year? From 50,000 to 60,000.

450. How many were purchased? About 4000 or 5000.

451. The rest you shipped as agents? Yes, we were the agents for the growers.

452. Who took the risk? They took the risk, and we sold through our brokers in London. We had a good quantity at a reduced risk for the Messrs. Shoobridge. Five of the Messrs. Shoobridge shipped 28,000 cases.

453. Are you aware that the fruit-brokers, in sending in their accounts to the producers, are in the habit of representing certain cases as condemned or faulty? Yes, they do.

454. How do they ascertain the condition of the fruit—do they ascertain it themselves? I can't tell you that.

455. Or, do they take the word of the buyer? I can't tell you; it would be only speculative on my part.

456. If they report a certain number of cases as condemned, either they must have examined and condemned it, or it has been sold as good and the buyer has condemned it afterwards, and they take the word of the buyer—which is it? I could not tell you.

457. Do they examine it? I cannot tell. I know one broker, Mr. Jacobs, makes a charge of 3d. per case for examining and sorting the fruit.

458. But all the brokers, so far as I can ascertain, are in the habit of sending in accounts showing that certain cases are condemned? Yes, the fruit might be frozen, perhaps.

459. But how do they know that—in the case of the particular broker who charges for examination, does he examine? He may examine or not. I suppose he is no better than the others.

460. Don't you think it desirable that the producers here should know how the fruit is treated both before and after the sale? Yes, that is one of the most important things; it is all they want that I can see, if they have someone at home with power to give notice to those who are responsible for any faulty fruit.

461. Do your producers contract with you to send or ship a certain number of cases? Yes.

462. And if they don't send that number do you charge them the freight for the cases? No.

463. If a man contracts with you to send, say 150 cases, and only sends 100 cases, and by your contract with the company you are bound to send the 150 cases, and, therefore, the man has broken his contract with you—how do you act in such a case? Well, we would fill up any deficiency at our own risk and expense.

464. You would buy? Yes; we buy fruit and fill up the space.

465. Do you lose on the freight, or do you fill up to save loss? Oh, we always stand to lose. We lost this year between £200 and £300 in this way.

466. What advantage is gained in the disposal of fruit in London—I mean, what would the producers gain by having an agent there? Well, they would have a man to represent them at the other end.

467. What, in your opinion, are the influences he could bring to bear on the brokers—say the broker has a certain amount of fruit not in the same condition, either he examines it, or he takes the buyer's word, and the fruit is condemned—how could an agent affect the broker under such circumstances: the consignment of fruit is consigned to the broker as the consignee—how could the agent affect the broker? Not in any way. The broker would not listen to him.

468. Then, how would the agent affect the brokers in regard to fruit? Well, the fruit would have to be sent to him, and he would require to have all the power.

469. Would it be wise, and a check on the broker, who is the master of the situation you say, to make the agent the master of the situation? What I say is, that if you could get the mail companies themselves to allow an agent to examine the fruit, and to say which is to go to the market for sale, and which is to remain at the dock to be delivered after further examination, it would be a good thing.

470. Then, if all the consignments were to pass through his hands—of course that would be necessary—he would open the cases, sort and repack? I don't know that he would do that. If the mail companies would recognise him he would sort the fruit out and say which is damaged and which is not. He would advise the broker as to which fruit was damaged. The producers here could then have an arrangement with the brokers that they are not to sell any damaged fruit, but that all is to be sorted and repacked before sale.

471. Would that not mean a large expense for storage and other expenses? You see the broker has to be satisfied that this is necessary, and he would have to take the word of the agent. Would it not mean a large expense for storage, examination, and otherwise? Now, this is all done by the broker. We don't know it is done, but it is supposed to be. If this responsibility rested with the agent, would it not mean a large cost? It would do if the agent were to handle the fruit altogether; but I don't think that would be necessary. I don't think there is anything costly in having an agent to examine the fruit. He would have to co-operate with the brokers. The agent would represent the Tasmanian producers, to examine the fruit in the docks.

472. Would that not mean a heavy cost for storage? No; it would have to be done before the fruit left the docks.

473. And that could be done? Yes.

474. In the examination of cases, would he go through all the fruit? No; he would take a case here and there, and if they showed any signs of wet and so forth, he would look at them. He would soon see if they were dry ones; if they were not then he would take a case or two more, and so on. After being examined the fruit would be sent from the docks to the brokers. Where some of the fruit is damaged, if these one or two lots were taken away from the parcel there would be every chance of getting fair value for the balance of the fruit.

475. Do you think there would be any serious risk if the Government advanced the freight? No, not a bit of risk.

476. *By the Chairman.*—The shippers and brokers have incurred a risk of losing under present conditions? That is because they have advanced the freight, and 2s. 6d. a case besides.

477. But they have suffered loss? I don't know; take Edward Jacobs & Sons for instance—they have not suffered much loss. They received commission on 70,000 cases, and although they advanced up to 6s. a case they could not have lost by it.

478. Have you known any one to lose who advances freight only? No.

479. What is the mode of carriage to the London market, speaking generally? I don't know. I would not like to say. I should say bad carriage has had a good deal to do with it.

480. Can you not tell us about the particular method, or as to the best method, of carrying the fruit? No, I would not like to suggest any method.

481. Where loss, then, has been incurred, it has been because additional advances have been made beyond the freight? Yes, every grower can get advances of from 2s. to 2s. 6d. a case now besides the freight from the London brokers.

482. *By Mr. Woolnough.*—You speak of loss to the producer in the last season? No, I don't think the producer has made much loss; the shippers have made the loss.

483. *By the Chairman.*—But, where the shippers have incurred loss it is where they have advanced on fruit above the freight or have bought fruit right out? Yes, that is so.

484. *By Mr. Woolnough.*—Is it, in your opinion, any disadvantage in the disposal of fruit that there are so many brands covering a small number of cases? No; small brands get as big a price, if not bigger, than the large brands. Some of the small shippers get a better price per case than the big shippers.

485. It has been represented to me by a salesman that it hurts the sale having so many brands, that they could not open a sufficient number of cases, and that it would be an advantage if there were a larger number of cases under one brand—you can say nothing on that? No. I think it would be better the other way. A London broker buying here, say, a consignment of 10,000 cases, will make you put it under, say, four brands, so that he can distribute it the better. If 1000 cases go bad in one lot, instead of affecting the whole sale it only affects that lot; but he has three or four brands, and he likes to have the loss distributed over the different brands.

486. How are the northern markets of England supplied with fruit? From London.

487. Are the northern markets supplied through sales at auction or by brokers selling privately. I don't know. The sales are supposed to be by auction. They give us account-sales by auction, and we suppose it is so. If they sell the other way, it is against the way in which they are supposed to sell.

488. *By the Chairman.*—They are under contract to sell by auction? Yes.

489. *By Mr. Woollnough.*—Then you don't know how the northern towns are supplied? By buyers attending the London sales.

490. The buyer goes into the sale just the same as the costermonger? Yes.

The witness withdrew.

The Committee adjourned until 2:30 P.M. next day.

TUESDAY, OCTOBER 12, 1897.

ALFRED WRIGHT, *called and examined.*

491. *By the Chairman, Captain Evans.*—What is your name? Alfred Wright.

492. Where do you reside? New Norfolk.

493. I know you take a deep interest in the fruit question, and have done so for many years. Knowing that you have at the present time a plan of an experimental nature, and knowing also that you have made an offer to the Government for the carrying out of that plan, I thought the Committee might get some information from you, and with that object shall put a few questions. You know something of the system of refrigeration on the mail steamers? Yes, during the time I was sitting as a Member of the Council of Agriculture I took a great interest in the subject, and set myself to grasp the position. I went into the matter thoroughly, and there are a number of resolutions as to the carriage of fruit on the minutes of the Council of Agriculture, most of which will be found in my name. The effect was to bring here several of what were called, at the time, outside boats. The results varied, but though the particular system adopted was not the same I urged, still it was my action which brought the matter about. I may say that since then I have taken up the subject carefully, and have chiefly given attention to the carrying of fruit cheaper than it is carried at present by the mail boats.

494. What is the cause of the failure of the application of the system as carried out in the carriage of fruit at present? I will first describe the system of refrigeration. The system is first to draw out the air from the hold, and send it back again cooled to a temperature that may be as low as zero.

495. *By Mr. Bird.*—Below zero? Yes, even below zero. It will then take, under ordinary conditions, five hours at least to bring down the temperature of the hold to 45 degrees. The difficulty with the present system is that the cooled air is sent in at a temperature considerably below freezing, with the result that fruit nearest the inlet is subject to the influence of frozen air, and the several rows of fruit nearest the air shaft become frozen: that is one difficulty. The next is, that in order to reduce the temperature as quickly as possible to 45 degrees, an extreme limit of coldness—even to below zero—is employed. The temperature throughout the hold is in consequence soon brought to 45 degrees. Refrigeration is then stopped, and this temperature may be maintained for a longer or shorter period without any further refrigeration. It is this stoppage of refrigeration which is the element of the main damage to the fruit. When refrigeration is in operation there is a circulation of air, and it is this which is the active principle in preserving the fruit, and not the evenness of a low temperature. When refrigeration stops, there is no circulation; the air becomes still, and in a few hours stagnant—decay in the form of sweating or heating then commencing. The fruit will sweat though the temperature is no higher than 45 degrees, when the air is still.

496. *By the Chairman.*—What would be the effect if the cold air was sent in at a higher temperature than 32 degrees instead of below freezing? It would take so much longer to reduce the hold to 45 degrees. In a paper read by Dr. Benjafield on the fruit sent by the *Port Pirie*, he quoted from a report by Mr. Walker, who went home with shipment. He said it took 10 days to reduce the temperature of the hold to 45 degrees. Meanwhile the temperature was anything from 90 degrees to 45 degrees till it got to 45 degrees. The air was pumped in as near frozen as possible, as they went on the idea that anything below freezing would damage the apples, therefore they took it as near freezing as possible. It took 10 days to reduce the temperature, and meanwhile the temperature would vary from 90 degrees to 45 degrees.

497. How do you propose to get an even temperature? I propose nothing of the kind. I have no faith in the value of evenness of temperature, and I know of no means of judging why evenness of temperature should be required.

498. You know that the agreement with the ships is that there should be evenness of temperature? Yes; and that some people say an evenness is necessary, but I know also that the apples which are held back keep best in the orchard, subject to a varying temperature of 90 degrees, down to perhaps 25 degrees. I referred this to a gentleman who has experience in storing fruit only the other day, when the temperature was about 80 degrees. I said, "Suppose you had 10,000 cases in store now, would you be frightened for them?" He laughed at me, and said he would be satisfied if he had the apples there, even if they had a temperature of from 80 or 90 degrees.

499. *By Mr. Bird.*—As a matter of fact, do you get that temperature at this time of the year? Yes; and possibly more. You get it from 70 degrees to 80 degrees. We had it pretty hot a fortnight or three weeks ago. It was over 79 degrees then.

500. *By the Chairman.*—Accepting the evidence that evenness of temperature is not necessary, is not a limit of temperature necessary? The apples to which Dr. Benjafield referred were considered the best cargo that ever arrived in London, although not carried on an even temperature for 10 days.

501. That was the *Port Pirie's* cargo? Yes, that was the *Port Pirie's* cargo. We have no groundwork on which to base the statement that evenness of temperature is necessary. As to a limit of temperature, I know of no basis on which to ground the argument that a limit of temperature is necessary.

502. *By Mr. Bird.*—Suppose it were 100 degrees? 100 degrees will preserve fruit rather than cause decomposition.

503. *By Mr. Woollnough.*—What is the proper maximum of temperature? The higher the temperature, the greater the preservative effect; evaporation goes on and prevents decay. We heat fruit to preserve it, and the more the moisture is taken from it by means of heat the better it is preserved.

504. Then, I understand that for the safe transport of apples you put out of Court altogether any question as to regularity of temperature? Yes, as far as it applies to decomposition.

505. And the whole question is in the circulation of air? That is the whole question,—the circulation of air of the hold.

506. *By the Chairman.*—Why do some cargoes preserve better than others? Well, I have been some time enquiring amongst engineers as to the reason of this, and it confirms me in the opinion that we can never rely on the engineers doing their work systematically,—it is impossible. The actual conditions are these:—If the outside temperature is high the refrigeration has to be more constant, or the temperature of the hold will gradually rise, but if it be 60°, and it is more likely to be 60° than 70° in May going home, very little refrigeration has to be done. After refrigeration is stopped, the hold will maintain a temperature of 45° for a certain period, and no circulation of air going on. Refrigeration having ceased, and there being in consequence no means to produce circulation, the air is still, and stagnation follows. The higher the temperature, of course there is the more necessity to continue the refrigeration.

507. I suppose, the greater the heat the more necessary to continue refrigeration? Undoubtedly; the circulation of air is the point. You will understand that on board these boats the engineers naturally use as little power for the refrigerating engines as possible, and they continually test the temperature of the hold. There is a small shaft connected with the deck, down which a thermometer is placed to test the temperature of the hold. So long as it remains at 45°, or about 45°, no refrigeration goes on.

508. Then you contend that it is circulation of, and not cool air that preserves the fruit and prevents stagnation and decomposition? I contend that no decomposition can set in so long as there is motion in the air—still air induces decomposition. Practically, circulation of the air is the solution of the difficulty.

509. *By Mr. Bird.*—Do you want to say that if we laid an apple on this table for six months it would not decompose? That would depend on the conditions of the room. The apple might shrivel; it might decompose more or less where in contact with the table, and where there was no circulation of air decomposition would set in, possibly in the stalk, or where the depression in the apple prevented the air from circulating, but if you have fresh air all round it it will not decompose.

510. *By the Chairman.*—Your idea, I understand, is that until the apple matures decomposition is very unlikely; that while it is not mature there is little fear of decomposition setting in? If the apple is heated through the air being stagnant, decomposition would set in. If you dry the apple, as they do in the process of evaporation, however ripe, it will not decompose. There must be a certain condition of the fruit to produce fermentation, and decomposition is, practically, fermentation. If you put an apple on the table it will keep for ever if the conditions are favourable. It will shrivel, of course, but it will not decompose.

511. Can you suggest any scheme by which the chances of decomposition may be prevented? There are improvements which I can suggest in connection with refrigeration, and I do so recognising that there will be for some time yet—until the idea is exploded—a demand for refrigeration. I therefore set myself to find means of making the mail companies' system applicable to apples. I erect a partition the whole width of the hold, and from floor to ceiling at the end of the hold at which the cold air inlet shaft is placed, at a distance of about 18 inches from the end. At the bottom of this enclosed space I insert a fan enclosed in a tube or shaft. This tube is carried around or about the hold, and the cold air is drawn through it by the fan and distributed about the warmest part of the hold. I contend that the air, though entering the enclosed space at a low degree of temperature, when discharged is above freezing, consequently there is no damage to the fruit from freezing. Further, the motion of the fan adds to the current, and being in motion continuously, whether refrigeration is going on or not, a circulation is maintained always, thereby preventing sweating or heating. For the sake of increasing the current I insert another fan at the opposite corner to the other. Both fans are driven by electricity derived from the ship's dynamo. Their cost would be about £22 each.

512. You have a model, I understand, and will let the Committee see it? Yes. The plan will take away the weakness that at present exists in the refrigerating system, the circulation of air continuing when the refrigeration stops.

513. You mean refrigeration being stopped by something happening to the machinery; or if refrigeration were stopped for a day or so your improved plan would still be in action the whole time: if anything happened to the machinery the fans would still be in action? Yes; or when the machinery is stopped because the temperature of the hold is sufficiently low.

514. You have lately been to Melbourne and Sydney? Yes.

515. Did you approach the steam companies when there on the subject? Yes. I saw Mr. Withers, the manager of the P. & O. Company in Melbourne; the Sydney manager I could not see. Mr. Withers expressed a desire to see the model, and he said if the plan were offered, the company would adopt it if they saw no difficulty. It is the only method I know of for remedying the difficulties in Haslem's refrigerating system.

516. *By Mr. Woolnough.*—Your plan is to get a perfect circulation of air? Yes, and to take away the effect of the frozen, and prevent foul air.

517. Would your plan, or some modification of it, be sufficient without refrigeration at all? Not in the case I have described, because there would not be sufficient power applied.

518. *By the Chairman.*—Now, you have told me you will show us the model this afternoon; meanwhile have you any other suggestions for the improved transport of fruit? There are two suggestions which have been made as to how the temperature might be reduced and the circulation of air maintained. One is by passing the atmospheric air through pipes in a separate chamber where the air is below zero. The air is cooled there, and is supposed to pass into the chamber where the fruit is at a suitable temperature. At present that is only a suggestion which has been given to the mail companies. It is Messrs. Peacock and Shoobridge's plan. The objection to it is, first, that the air passing through a frozen space will produce snow and so fill up the pipes; that is an inherent difficulty. Further, the reduction of the temperature in the smaller space the cool air would have to go through would not appreciably reduce the temperature of the hold. If you send 500 feet of cold air into a space containing 40,000 cubic feet it would have very little influence in reducing the temperature. To reduce the temperature there is not volume enough of air going in; it is immediately drawn out, and there would not be sufficient to cool the temperature of the hold 5 degrees. Another difficulty is the expensiveness of putting in the cooling chamber, and consuming a large amount of space in the hold, which is of consequence where every inch of space is valuable. How the circulation is to be kept up I cannot see. I believe it also proposes to have a fan to exhaust the air inside the hold.

519. That is the brine pipe system—that is Hudson's plan, is it not? To some extent; but the difficulty would be to keep the hold at an even low temperature—it seems impossible, the amount of cold air is not sufficient. These are weaknesses that appear to me in the proposal. I do not put them in the sense of carping, but I can't see how it is to be done. Then, again, that method would not reduce the cost of freight—that would still remain at 4s. 3d. per case, as it is now.

520. Have you any knowledge of any experiments made under these methods, especially under Hudson's system? I think that is a system which could be adopted on land, where space is of no moment, but in a ship where every square inch of space is of moment, and costs so much money, I do not see how a plan like that can be practicable.

521. You mentioned another system by which a circulation of air may be maintained and the fruit preserved in good condition? Yes, that is simply the drawing of the atmospheric air in and exhausting it again in such a way that the circulation should be felt through the hold. Of course there would be some amount of cooling. I don't make that a condition of the value of the system, but there is a degree of coldness, to the extent of 10° perhaps, induced by the combined action of drawing in and exhausting the air.

522. *By Mr. Bird.*—Your plan, as I understand it, is that you draw the air in with one fan and out with another? Precisely so.

523. *By the Chairman.*—What is the advantage of this? To maintain a circulation of air through the hold.

524. *By Mr. Bird.*—How do you secure that all through the hold? By fans fixed in air-shafts placed in a particular position, and also by stacking the fruit in such a way as to secure a flow of air round it, and providing passages between the stacks of cases for the air to pass through.

525. *By the Chairman.*—You will be able to show that directly on the model? Quite so.

526. *By Mr. Bird.*—Would not this plan reduce the temperature? Yes, but the question of degree of temperature is only a matter of opinion, and can only be tested by experiment. I believe by this plan the air would be reduced about 10° less than the atmosphere. That would be the average, but the temperature will be different in the lower hold, being below the water-line. It is generally about 5° less than the atmosphere. I calculate that the temperature of the hold will be from 10° to 15° below the atmosphere, probably more.

527. Then, you want to prevent the sweating of the apples causing damage? Undoubtedly; that is the only way of preventing damage unless the fruit is entirely air-tight. If you could hermetically seal the hold, and put the apples into air-tight compartments there might possibly be no damage at all,—I am not sure about it.

528. That has been tried, has it not? Yes; and it succeeded in a small way.

529. You say that extreme heat won't produce sweating? Extreme heat of itself will not produce sweating, although, of course, where there is fermentation there is always heat evolved. Whether the temperature be 35° or 90° there will be sweating, or at anything above freezing. The lowness of the temperature will not prevent sweating, nor will a high temperature induce sweating where the air is in motion.

530. *By the Chairman.*—I gather from your opinion, that as long as there is a free current of air in the chamber no sweating will take place, whether there be a high or a low temperature? It is utterly impossible; whether the temperature be 32° or 90° it is utterly impossible for decomposition to set in.

531. *By Mr. Bird.*—But sweating is not decomposition,—it is only a giving off of moisture that remains there and keeps up a dampness, and so induces decomposition. If you had a free circulation of air round the fruit where evaporation is going on, and all the wetness were carried away, you mean that the evil effects of sweating would be prevented? Quite so.

532. And if you get this circulation of air is that sufficient in all cases without refrigeration? I say that you need no refrigeration if you can get a free circulation of air.

533. *By the Chairman.*—There is one point I would like cleared: would not the continuous circulation of air as proposed in your system—say the even and continuous circulation of air at 75°—is it not possible that such a circulation of air would shrivel the fruit? No; shrivelling is caused by evaporation; in giving off its moisture the apple shrivels. The important thing is to fix the evenness and regulate the speed of the power you use so that it will not give too strong a circulation of air. If it were proceeding in at ten miles an hour the force would probably be too strong. What would be termed a gentle breeze is about the force required.

534. *By Mr. Bird.*—But you would not be able to get that all over the hold? Yes, you would get it through by the channels formed in the packing of the fruit, which would rather induce speed in the current than decrease it.

535. How would your scheme prevent an undue current of air? That would be done simply by the adjustment of the size of the fan and the speed. Once adjusted you would always get the same speed. You would want a stronger power with a full hold than with an empty one, as the resistance of the obstruction in the shape of the fruit in the hold would be very great, and the air would have to enter at a stronger speed than if the hold were empty.

536. *By the Chairman.*—Have you any knowledge as to the transport of fruit where no artificial means for the reduction of temperature has been employed? It was so carried by the Aberdeen line of boats about 2½ years ago. One boat, the *Australasian* I believe, carried her fruit perfectly, and the means employed was the circulation of air. I came across the man in Sydney who fitted the boat, and he described how it was done, and this was confirmed by Dalgety & Co's. Manager. As I understand it cold air never went near the hold; it was simply a system of ventilation, and no ship carried her fruit better than the *Australasian*. There was not a single case of fruit that was not quite good. The *Warrnambool* was here the same day, and she was supposed to have the same method. I saw the agent here, and I inferred from what he said that they regarded their method as a secret. I don't think it was any great secret. I believe they adopted just the same system as the *Australasian*. The application of insulation would be wasted, as it could be of no value to the fruit. They simply adopted the system of exhaustion of air.

537. Do you know that much of the fruit stowed in the *Warrnambool* was in the refrigerating chamber? No; but I know that circulation of air was used.

538. You can't say that the *Warrnambool* was fitted up in the same manner as the *Australasian*? No, I can't say that absolutely.

539. Under those conditions, have you any means of saying how you would stow the fruit—in what kind of cases? Yes. In order to add to the circulation of air, I advocate that the apples be not wrapped, and they should be put into skeleton cases as far as possible, that is, cases with as little side to them as possible, like the orange cases, which have just side enough to hold the oranges in. You should have four pieces of wood each 2 inches wide in the 14 inches of depth. The circulation of air would then move round each apple more freely. I think, without doubt, that apples will, in the next year or two, be packed that way.

540. *By Mr. Bird.*—Do you know that in the London market fruit that is wrapped fetches a much higher price than any other? That is possible, just as you buy cheap cigars with a red label round them, for instance. The red or gilt label is an attraction to many people, and by its means a higher price is obtained for cheap cigars. That is the main advantage of the paper wrapper. It may have another advantage where the fruit is brought down to the ship in dry weather; it would prevent the dust of the road from getting to the apple, but that could be equally well obviated by covering the cases with a cloth.

541. *By the Chairman.*—Is it true you have made an offer to the Government for an experimental shipment? A company has offered to bring a vessel in March, and to fit up the hold to carry 17,000 cases, the freight from the wharf to be 2s. 3d. per case, including the passage of an expert to go home with the fruit. They will also provide the necessary power for driving the fans.

542. *By Mr. Bird.*—That is apart from refrigeration? Yes, that is apart from refrigeration altogether. We are to fix up all the appliances and superintend the working. They give us the hold and the other advantages I have named at a price for freight amounting to 2s. 3d. a case.

543. What will the other expenses you will be at amount to? We have to find the plant, which, I estimate, will cost about 3d. a case. We should have to buy a dynamo with engine attached. The full cost would not exceed 3d. a case. The Government are offered the freight at a total cost of 2s. 6d. a case.

544. *By the Chairman.*—Did you interview any electricians on the matter when you were in Melbourne? Yes. Messrs. Siemens Bros. went into the whole plans, and it is from them I obtained the cost of fitting.

545. Are you at liberty to give the Committee the particulars? Yes. I have received an estimate for it, which comes to about £250. That includes an engine and dynamo and four fans. If we wished to sell them afterwards we should get a large portion of the price back; of course the ship would no doubt take them if the experiment was successful.

546. You say the ship would take them? Yes, no doubt, if it was a success, but in any case we could sell at probably two-thirds of the cost.

547. *By Mr. Woolnough.*—Are you satisfied that the 2s. 6d. a case would cover the freight and the prime cost of the machinery? Yes.

548. And the machinery would be available for other ships? Yes; or you could dispose of it if you wished.

549. Then, practically you have part of the cost of the machinery to the good: the 2s. 6d. is not the permanent cost? That is it.

550. *By the Chairman.*—Are you in a position to tell the Committee the details of the offer made to the Government? What you think the Government action should be. I don't ask you to divulge anything if you feel you can't do it, but if you are in a position to do so it would help the Committee? I can do so. I told the Government that the shipowners who made the offer included in the 2s. 3d. freight a passage home and back for the expert, and I proposed to go myself without cost to the Government, provided that any return to myself should be paid out of the price realised for the apples, after allowing for the price then current in Hobart. I said before I received anything the growers should first receive 3s. a case for their fruit, and I am willing to depend on the price realising over 3s. a case. I proposed that the difference should be divided between myself and the growers.

551. You mean that after 3s. a case net and the freight is returned to the growers, any surplus there may be you want to halve with them? I said that I was prepared to agree that it should be divided between the growers and myself.

552. You mention that part of it, but is there not something else in the offer you made to the Government—I mean as to how the Government shall deal with the fruit? That the Government guarantee the freight up to 2s. 6d. a case.

553. Is there not a condition beyond that that has been suggested to the Government—suppose the thing is a failure? In that case the Government will lose their money. The growers will not be then called upon to pay the freight.

554. Then, if the fruit is carried successfully, if the matter is taken up by the Government, or the Committee recommend it to the Government, if it is a success the grower pays the freight, which will be a first charge on the fruit; but if it is a non-success the Government has to lose the freight money, and the grower will lose his fruit? Yes, that is it; but there is no danger of the Government losing their money. In giving my services for a year without any return there is fair evidence of my confidence.

555. *By Mr. Woolhough.*—The Government is satisfied first, then what is left goes to the grower, and when the grower is satisfied then you come in? Yes, that is so.

556. The models you exhibit this afternoon, one of the objects is to improve the mail companies' meat refrigeration system—could that be worked apart from the refrigeration system? There are two models. If refrigeration were considered necessary I am satisfied the one improving the present system is efficient, but I cheapen the transport by the system shown in the second model. Many years ago I urged the Messrs. Webster to suggest the mail companies to adopt it. I was the first to ship apples 12 or 13 years ago by a direct boat, and that led me to take up the subject and trace the cause of the loss.

557. Have you any information as to whether the mail companies will accept an improvement of the sort? I don't think there is any doubt that they will accept an improvement on their own system if not too costly; but to ask them to accept an entirely new system, well, under their contracts, it is beyond them for two years. I would like to say one other thing about the advantage of the circulation of air system. Apples are often reported as wet, that is, much moisture has fallen on the fruit. In consequence of this the paper has become pulped, and this gives the apples a bad appearance, and it is that which often accounts for low returns. The mere circulation of air would prevent that accumulation of moisture.

558. Have you any experience as to how they sell apples in the London market? I have not. I have had experience in buying produce in Mincing Lane.

559. But have you practical experience of the mode in London of dealing with apples? I have not; but from my experience I think there is but little trouble about that. For many years I was a buyer of mother-of-pearl shells, and, occasionally, for two or three lots buyers would arrange not to bid against each other, and lower prices might rule, but, practically, they fetched the market price. The main question is to get the fruit home in good condition. To my mind the moment we get cheapened freight and perfect transport the trade will increase, and where we get one buyer now we shall get a hundred later on. Buyers will then be able to agree as to price. When it can be assured that every case will be sound buyers will come regularly and will offer a stated price, say from 4s. to 5s. a case here, but until you get better conditions of transport you can't expect that. A buyer told me the other day he thought he would in future buy fruit in South Australia instead of Tasmania, for shipment home. The shipment of apples from the other colonies is now such a factor in the business that we must seriously consider the means of cheapening the transport, as the larger export will bring down the prices in London, and unless we can get our fruit home at lower freights the returns will be poor.

The Committee adjourned until 2.30 o'clock.

AFTERNOON SITTING.

Mr. Alfred Wright explained the two models exhibited on the Committee table, which represented a section of the hold of a ship, with fans forcing the air in and drawing it out. The system was one of "forced circulation." The fruit would be stowed in tiers of three cases, a space between each for free passage of air. That would take up about 5 per cent. of the space of the hold.

FRANCIS FREDERICK BUTLER, *called and examined.*

560. *By the Chairman.*—What is your name? Francis Frederick Butler.

561. And where do you reside? At Moonah.

562. No doubt you will have seen through the press that this Select Committee has been appointed to get information in reference to the products of Tasmania and their export? Yes, I have noticed it.

563. The Committee has decided to report first on the fruit export, and knowing you take a deep interest in fruit matters they have asked your presence in order to get some information from you. How long have you been connected with the fruit trade and the shipment of fruit to England? For nine or ten years.

564. During that time what has been your experience in shipping fruit? I have had experience as long as fruit has been shipped to England. I may say that I have been very successful, generally speaking. There have been some exceptions, but I have nothing to complain of very much. I will give you one practical case. I sent an experimental lot of ten cases packed in _____ and asked them to write. I received a letter from the woman who bought them, in Lambeth, and she said they arrived in excellent condition, all except two cases. She did not get one good apple out of them. That went to show that the two cases must have been in an unfortunate part of the vessel, and led me to think that all parts of the vessel were not alike.

565. This fruit you refer to was carried in the refrigerating chamber? Yes, it was.

566. Have you shipped any fruit during the last two or three years? No, I have generally sold it to go home.

567. What is your opinion from your knowledge as to the non-success in getting the fruit home last year? I think it was neglected. It was frozen, and probably the freezing was the cause of the non-success.

568. Have you in your mind any other way of carrying fruit home? Yes. I have always thought that fruit would go home safely without being cooled to any great extent. At first I have always sent a few experimental cases home as general cargo. That was in the first few years, until I was stopped by one of the companies, who would not take any more in that way.

569. What was your success? It turned out just as well as it did when refrigeration was used. Of course it was in small quantities. People said that in large quantities it would not have been the same, but how can we say that?

570. In reference to the model you saw this morning, as to a system of ventilation and the circulation of air, what is your opinion? I am not an expert, and would not pretend to say it would be a success by looking at it; but it looks to me that it is likely to succeed. It introduces the air and simply circulates it through the apples. There is no means apparently of cooling that air at all, and I believe in going through the Red Sea the temperature is up to 100° or more.

571. There is a plan showing the March and April temperatures in the Red Sea and by the Cape route; it is not so high as that? I have not been through the Red Sea, but I should have imagined the temperature was much more than that.

572. You said you were afraid there might be a want of success in carrying out this idea of Mr. Wright's—in fact, that the air would not be cold enough. You told us you sent fruit home as general cargo, and in every instance it went home perfect? Well, nearly perfect, we will say.

573. Then there would be no circulation of air at all—your statement was that it went as general cargo? Yes.

574. I would like to ask you, in a shaft of this kind (referring to the model), with the air introduced by fans, would it not become cool when induction takes place where it goes through the ventilators at the top—don't you think the revolution of the fans would cool the air? No, I don't think that cools the air.

575. Have you any opinion as to how the fruit business is conducted in London—have you any experience of that end? Yes, I had in the first few years, and I am one of the exceptions who had not much to complain of. I sent my fruit home through three different agents, and it all came out fairly alike. I could see nothing very wrong. I did on one occasion think that the account sales were cooked to a certain extent in an account for a cargo that carried badly; still, they accounted for nearly every case. There must, I know, be loss at some time where a cargo is being sold by thousands of cases. They accounted for every five cases, and there must have been some worthless cases. There was nothing wrong in the accounts, but where they have to make out accounts for a large cargo they must have taken a general average.

576. What is your opinion as to the mode of business in the Agent-General's office at home? Well, I suppose we must have a figure-head to conduct Government and other business, but I think we should have a commercial man as well. It would be incompatible that the Agent-General should be a commercial man.

577. Can you give an idea as to what the commercial man's duties should be? No, I cannot give an opinion on that subject, it is too exhaustive. He would not be able to sell fruit, because the present brokers and dealers have the business in their hands; they have their established customers, run bills and give long credit.

578. Would you be able to assist in an experiment for sending fruit home by the proposed method at present? No, I cannot afford it. I grow fruit and send it home, but I cannot afford experiments, because I don't want to lose money on it in the case of an unsuccessful experiment. In fact I have now decided to sell all my fruit here.

579. You would not be prepared to find a few cases if the Government gave the freight? Oh, that is quite different. I would not mind up to fifty cases or anything of that kind. I should feel inclined to do more, so long as I looked after my own business first.

Mr. Butler withdrew.

JAMES GREGORY, *called and examined.*

580. What is your name? James Gregory.

581. And where do you reside? At Sandy Bay.

582. You have some idea from reading the papers that a Select Committee has been appointed to get information as to the products of Tasmania and a better system of carriage to England. We are dealing with the fruit question first. I know you have given a great deal of thought to the methods of carrying fruit home. Are you of opinion that fruit can be successfully carried to England by any other way than by refrigeration? I honestly confess that I never believed it could be carried safely in that way. It is foreign altogether to the preservation of fruit. The cold air when condensed produces water, which adheres to the fruit and must rot it. I might, perhaps, tell the Committee what occurred during my visit to England. I had an experience in coming back from England that at once fully convinced me, and that was before the fruit business took the shape of an export trade. I am aware that fruit had been taken to England successfully, but I did not think then that the fruit industry would have developed as it has done. I had an experience this way. A quantity of pears were made a present to me in the West of England before I left. They were picked in September, and I left London on the 5th November. They were not of a keeping sort, but an early sort of pear, but still they were good eatable fruit. I fitted up a shelf in the cabin I took on board the *Massilia*, and placed the pears on that, and when we wanted a pear or two we took them from the shelf. When I got to Melbourne more than half of the pears were still intact, not any rotted in the whole distance. They were just as sound and eatable when we got to Melbourne as when we left England; I could not see any difference. They simply lay on the shelf and had a free circulation of air. The cabin was on deck, and there was a window opened at the foot of my berth. The pears lay on the boards of the shelf with just a fillet of wood to keep them from rolling off. They were laid close

together as if in a box. When Mr. Fryer went to England I told him of this, and said I don't think you will find the slightest difficulty in carrying apples if you let the ordinary air get at them. I knew 40 or 50 years ago that if we put fruit in a hold and nothing but carbonic acid gas got at it, it would be bad in three or four days.

583. Have you given this question of ventilation much study? All my life. Methods for the promotion of ventilation have occupied the greater part of my life, and I have found from particular experience that you can't under any circumstances force ventilation. You may induce it, but you can't force air into a room which is already full of air if you don't have a ready means of exit, and then the foul air won't leave if you don't induce the air to go away. What brought it particularly under my notice was before the House of Lords was brought under proper ventilation. They spent thousands of pounds trying to ventilate the chamber. At length one of the workmen thought of a plan for getting rid of the foul air, and it was done in a very simple manner; I may say it was a success, because it has never been altered. In the corners of the room they had plenty of ventilation, but the foul air would not go out. Well, in the corners of the room he run up square shafts which at a convenient height had a little door handy in the wall. Inside the shaft he had a gas jet, and at the top of the room he had Arnott's valves. The result was the hot air ascended and went out. That is the system in England now. They have brought in Tobin's system since to admit cold air near the floors, but the system I have described is still going.

584. You have had an opportunity of looking at the models of Mr. Wright's system this morning; what is your opinion as to that? I should have to modify my opinion when you come to the hold of a ship. In a dwelling you want no provision for the admission of cold air; and if you admit it too freely you make a mistake. In the hold of a ship it is a different thing altogether. From what I can imagine the hold of a ship would not have the means of getting pure air into it the same as a room. It would be necessary to admit it in limited quantities.

585. *By Mr. Bird.*—You mean to drive it in? No, you need never drive it in, it will come in right enough if you let it. The difficulty is to get the heated air out. Cold air will flow in fast enough if you get the heated air out.

586. The hold is an insulated chamber; you must have some means of getting air in? If you have shafts to get it in it will go in rapidly whether or not.

587. *By the Chairman.*—But you want means to get it into the ship—I mean from above into the hold? Make your shafts large enough, but when that is done you don't want to drive it in. It will go in fast enough.

588. But you have a difficult matter in getting air into a ship when she is going one way and the air another? There will be no difficulty so long as you have proper exhausts. The moment you make a vacuum the air will get down fast enough, no matter which way the wind blows. It is astonishing how powerful the air is. I have thought of a plan something like that where by a system of shafts the air might be drawn into any part of the hold.

589. *By Mr. Woolnough.*—In your opinion if you can get air into the hold, and you can get it out, there will be a sufficient current without artificial aid in the shape of fans? I believe so. You would want various shafts, and you would want sufficient exhausts, not in one place only but in every part.

590. You think the passage of the air would be quick enough to prevent damp from forming? I am satisfied there would be no damp if you get pure air in. It is generally pretty warm all the way home, but the apples don't want specially cold air. If you can get pure air in without freezing that is all that is required. If you get frozen air in it must cause dampness.

591. *By the Chairman.*—Have you had any experience of standing under a ventilator or a windsail? I have been near to them, but I have not taken particular notice.

592. Did you not notice that under a windsail the air is far cooler? Yes, the rapid passage of the air would make it feel much cooler.

593. *By Mr. Bird.*—We have a chart here showing that the temperature in the Red Sea during the months of March and April is not more than 70° or 80°? Yes. It was very hot when I went, much hotter than that.

594. *By Mr. Woolnough.*—Supposing a fan was useless in increasing the rapidity of a current of air, would it not be useful in cooling that current? I don't think it is at all necessary; of course if you put shafts as inlets the outlet would have to be at the opposite end of the hold to the inlet.

595. *By Mr. Bird.*—Do you think that air from a fan is any cooler than the ordinary air that the fan is driving? It may be. All ordinary air driven forcibly against you feels cool. The more open the cases the better; and the less you paper the better; the paper gets damp, and the damp gets on the apple and you can't dry it. I am sure it causes rottenness.

The witness withdrew.

The Committee adjourned until 2-30 next day.

WEDNESDAY, OCTOBER 13, 1897.

WILLIAM DAVIDSON PEACOCK, *called and examined.*

596. *By the Chairman.*—What is your name? William Davidson Peacock.

597. Where do you live? In Lefroy street, North Hobart.

598. Of course you know this Select Committee has been appointed to get evidence as to the products of Tasmania and a better mode of dealing with them. We are enquiring as to fruit first. How long have you been connected with the business of exporting fruit to England? Nine years. Before that I was manager to the firm of George Peacock and Sons. I have been engaged in it since the inception of the business.

599. How long altogether? About eleven years.

600. Can you give the Committee your experience during fifteen years, or during your knowledge of fruit cargoes? Well, my experience has been variable throughout. Some cargoes went in good condition, others with alleged damage; some with a great deal of damage from the fruit getting wet, and from heating, &c. It is a moot point whether it was heating or not. Some think the collection of carbonic acid gas causes the trouble. This year the damage has been much greater than ever, not from any want of interest on the part of those in charge, or care on the part of the Directors of the steamship companies, but from not understanding clearly the cause of damage. The means taken this year have, in our opinion, only accentuated the damage. It is this way: in other years the cases were made close, and the Directors of the company got the impression that the fruit heated because the cold air from the refrigerating machines could not get to the apples. They asked us to make our cases more open, so that the air could get in. They also agreed to introduce an innovation into their steamers by putting battens between the rows of cases; well, the effect of it has been that the cold air from the refrigerating machines has had a greater power of penetration. The fruit has carried worse than before, when there was a certain amount of heat as a set-off to the extreme cold. The cold air has gone right through, and the fruit has been more frozen. The frozen air coming into contact with the moist air of the hold has made a deal of wet, and caused damage. What we want is a dry cool atmosphere, not a moist one. We have put our views before the steam companies, together with a lot of detailed evidence, but we think we have got at the bottom of the trouble, and that we have got at a means of preventing a repetition of it.

601. You are of opinion that the carriage of fruit last year represents one of the worst years you have had? Yes.

602. And you are convinced in your own mind that the non-success of the fruit is owing to the carriage of it? Well, the agents themselves do not altogether think so. I have received a letter from Mr. Walker which I will read. They seem to attribute the injury to the fruit to the fact of its having been packed riper this year than usual. Mr. Walker writes:—

London, 20th August, 1897.

Messrs. W. D. PEACOCK & Co., New Wharf, Hobart.

GENTLEMEN,

I AM in receipt of your letter of the 20th June. I feel that it would be idle to attempt to enter into an argument from opposite sides of the world as to the cause of decay in fruit which you saw only before shipment, and not as it was delivered here, and the bulk of which I saw only on arrival here, and not before shipment. It is true that some of the fruit arrived frozen, as, unhappily, is the case in almost every ship, and I have no doubt whatever that a considerable proportion of the wet cases were the result of excess of cold air. But I am equally positive that a large quantity of the A.P.M.'s, R.P.'s, and S.P.M.'s which I inspected were simply over ripe, and I felt it reasonable to attribute this, in part at least, to the hot dry season in Tasmania this year, giving the fruit, especially in certain districts, a tendency to mellow more rapidly after shipment than would otherwise have been the case.

I have no doubt you firmly believe the damage to have been due, as you state, solely to freezing; but I would take the liberty of pointing out to you that, without having seen the fruit in the damaged state as delivered here, you really are not in a position to state what the cause of the damage was. The most you can possibly do is to form a surmise on the subject. Had you been here and heard, as I did, men of considerable experience assigning diametrically opposite causes to the damage of the same fruit submitted to them, I think that you would have been a little less dogmatic in the expression of your opinion.

Personally, I would have given a good deal to have had you in London at the time the fruit was arriving, for my long acquaintance with your sagacity and sound judgment warrants me in the belief that you would have readily acquired a correct grasp of the general situation which it is impossible for other people to convey to you, and you would have avoided some of the erroneous impressions which your two last letters bear witness have been formed in your mind.

Replying to your enquiry re Victorian cases, they are made of pine and do not appear to get stained; they are long, narrow, and fairly open, but I cannot give exact dimensions, as they are not now on the market.

With kind regards, &c.,

THOS. B. WALKER.

I have also another letter from Messrs. E. Jacobs & Son, which is as follows:—

London, 27th August, 1897.

Messrs. W. D. PEACOCK & Co., New Wharf, Hobart.

DEAR SIR,

WE are in receipt of your letter of July 12th, referring to the condition of the fruit ex s.s. *Massilia* and *Ballaarat*. In the case of the former boat you say, we "appear to have made the unpardonable blunder of having nearly all the fruit cleared away before having it examined by the P. & O. Co." This is a very remarkable assertion, and one which betrays a curious lack of knowledge of the conditions which prevail here in business matters. Some day or days elapsed from the time that we requested the P. & O. Co. to examine the cargo, and the time that they sent a representative here for that purpose. The fruit had been sold in the meantime, and we were obliged to deliver it as best we could, and as quickly as we could. To have done otherwise would have thrown our entire business out of gear, and have resulted in a much heavier loss than was already sustained. Bad as the condition of the fruit was, it would have been worse, and the apples would have become absolutely rotten and worthless, by further delay; and you may be sure that the customers would have refused to take them at all. Moreover, both from the exigencies of the customers' demands, and those of our business generally, we are obliged to deliver goods as soon as possible after we have sold them. We could not conduct our business in any other way.

With regard to the contract as to the refrigerating chambers not being carried out, that is a controversial point which has been threshed out over and over again. We can only refer you to the letter we sent you on October 10th, 1896, in which the point is discussed *in toto* in all its bearings.

As to the difference between the prices of apples in the *Parramatta*, wherever the apples were frosty or wet it was so stated in the account sales. The prices of such apples varied during the season from 2s. to 4s., according to the extent to which they were injured. Where a difference of a shilling per case has occurred in the prices realised for the same brand, it may have been due to other causes. We frequently received the cargo from the boats in instalments, and sold all that reached us on market days without waiting for the completion of a particular brand. The next market day, when the remainder reaches us, it often happens that buyers, having become aware of the inferiority of a brand they have previously purchased, bid less for that mark.

Your remark that the fruit "ought not to have been carted straight from the ship to the Floral Hall, but taken to cool stores and carefully gone through," simply suggests an impossibility. You must bear in mind that ours is a competitive business, and our rivals would have their few apples up and sold. The cargo being in a bad condition, when yours were ready for sale the buyers would fight shy of them altogether, and your last state would be very much worse than your first.

Reverting to the *Ballaarat*, we enclose you copy of a letter received from the P. and O. Company, dated 16th June. It is illogical in face of this to blame us in any way as regards this steamer. This is the only letter of the company in which they openly admit the "unfortunate condition of a considerable portion of the cargo." As you will see, they lay the entire blame on the shippers, and advance their reasons for so doing. We are handing the original letter to Mr. Walker, which he will show to you when he sees you.

The condition of the apples in the *Ophir* was very good, and many people purchased apples out of this steamer and re-stored them in cool chambers, expecting to sell them later at higher prices. The experiment, however, was a distinct failure, as not only had some of the apples gone off, but the prices realised for the lot were much lower to those originally given for them. This disposes therefore of the question of taking shipments out of the cool chambers of the steamer and putting them in cool storage here.

In conclusion, we can only assure you that our experience of this business and of this market is not of yesterday. We claim to know every whit as much as anyone; we know what to do, when to do it, and how it should be done. The results of our experience and our best efforts are always expended on your behalf, but if the goods are very bad it is not in our power to perform miracles and make them better.

Yours truly,

EDWARD JACOBS & SONS.

603. In your letter it is stated that if the fruit could be landed in London in a sound condition there would be no doubt about remunerative prices being given for it? No, I don't think there can be any doubt about that.

604. You have, I believe, made a proposal, or you are prepared to make a proposal, whereby refrigeration can be made more perfect? Yes; we have a system, and have applied for a patent.

605. Do you think the mail companies will accept it? If we find the fruit, as we are willing to do, I think they will be prepared to fit up two of their largest carriers on this system. We are prepared to fit up one to carry 20,000 cases—any P. & O. or Orient boat will do. Our plans have gone through the hands of the best scientific engineers, and they say the system will be successful, and that it is the only way of carrying fruit safely. Mr. Wright and I have discussed the method shown in his model, but after the experience of a shipment to Vancouver I am afraid it is not likely to succeed. You remember that last season we sent 1000 cases of apples which were to be carried in a ventilated chamber; I will read you the letters in reference to them: one is from the Government Inspector at Vancouver, who says:—

Vancouver, B.C., May 8, 1897.

Messrs. W. D. PEACOCK & Co., Hobart, Tasmania.

DEAR SIRS,

I AM in receipt of your valued favours of the 1st and 2nd ultimo, enclosing specifications and documents for 700 cases apples for Vancouver and 245 cases for Victoria.

I am very sorry to report that the apples arrived in very bad order; they appear to be completely steamed and cooked. I thought, at first, it might be from bad ventilation in the ship, but from the Captain's explanation I can scarcely think it was caused by that. He says they were in precisely the same chamber that he brought apples a year ago, and that they came in the same steamer (*Tambo*) to Sydney, and the Captain thinks it is due to the season or the condition of the apple when it was shipped, or from natural causes. The 119 cases Crows Eggs were a total loss; I was not able to save one box. I think I will lose about 50 per cent. of the Pearmains. The Sturmer Pippins are nearly all good, and the whole average will, I think, be fully 40 per cent. I have already lost 254 cases out of the 700, and they have not repacked them nearly all yet. I refused to pay the freight on them, but the C.P.R. would not deliver any portion of the consignment until the whole amount of freight was paid, and anyway, they said the freight was guaranteed, and they did not care whether I paid the freight or not; and in case I did not pay it they would, of course, come back to you for it, so there was no other way, and I could not get the Sturmer Pippins and what few sound ones there were without paying the freight on the whole. I am promised by the Customs a refund of 75 per cent. on the duty of all the bad ones, but I have had to pay full duty here in the meantime, and they have gone to Ottawa. I daresay it will be several months before I receive the rebate.

Since writing the above the Fruit Inspector has been in with his report, and I enclose herewith a copy of the same. He has also made an elaborate report to the Hon. Wm. Moore, Secretary for Tasmania, which you could no doubt see by calling at that office.

I also enclose copy of a letter from Captain Hay, of the S.S. *Miwera*, in which you will see he takes a very different view of the question.

Yours &c.

J. E. CHIPMAN.

I have also the Captain's report on this letter, which is as follows:—

Canadian-Australian Steamship Line, HUDDART PARKER & Co., Ltd., Managing Agents,
Vancouver, 7th May, 1897.

J. E. CHIPMAN, Esq., Vancouver, B.C.

DEAR SIR,

I NOTE this (the Fruit Inspector's report), but at the same time cannot agree with him in this matter of ventilation. I ask you to remind this gentleman that there are two large doors, one on fore end and one on side of this chamber, about 6 ft. x 4 ft. each, besides an air-shaft with a down-draft and up-take accelerated by electric fan. Canvas wind-sails were used throughout this voyage, led through these doorways, and with a ship steaming some 13 knots hourly against a head wind, I should say there was a very adequate ventilation. Fruit cases were all stowed pigeon-hole fashion to assist ventilation, and I am assured that anyone with a knowledge of shipping will fully endorse what I say. I have to point out to you that just 12 months ago I carried to this port from Sydney a larger consignment of Tasmanian apples, which were landed in perfect condition. Those apples were brought from Tasmania by the same boat which brought this lot, and were carried on this ship to B.C. under exactly the same conditions of stowage and ventilation, and exactly the same conditions of voyage.

I therefore beg to say that the apples could not have been of the same variety as last year, and that the cause must be looked for in the apple itself.

Does it not appear to you that since a portion went bad, that this portion had scarcely been in the right condition for shipment, while the others which were in right condition came through the voyage all right?

I cannot see my way to accept the statement that they "are completely steamed and cooked," believing that their failure must be due to natural causes.

Yours faithfully,

CHAS. WM. HAY, Commander R.M.S. *Miwera*.

606. Well, from your experience are you not of opinion that the greatest damage to the fruit in the mail boats is caused by cold? Not by frost, primarily. The air is brought in at a temperature of 32°, and in the hold it comes into contact with a current of warm fresh air; the effect is to precipitate moisture which comes down as water on to the cases below it. Again, the cases nearest the inlet get cold first, and the cases further away get too hot. Of course they work by thermometer, which may show that the temperature is 52°, but that only shows the main result, not the temperature over the whole ship.

607. Then, in your opinion the only successful method of improved carriage to London is that you have suggested to the mail companies? Well, that is the method we are trying, and we think it will land fruit with success. I have a plan here which I can show the Committee; I think it is a method which commends itself to common sense.

608. Will your plan increase the freight on fruit, or decrease it? It should decrease it, but we want to demonstrate the plan first. Instead of leaving alley-ways, we propose to stow the cases close up, and we

propose to take in cool air at a uniform temperature throughout. In the Red Sea we should have to meet a temperature of 100°.

609. Not always; not in the months of March and April. There is a chart showing the average temperature for the whole of the routes, and the average in the Red Sea during those months is about 74°. These are the whole of the temperatures taken right round—that would be on deck, I suppose?

610. I don't know; I suppose it would be on deck. I see it reaches a maximum of 83°. Mr. Sutherland, the Victorian scientist, writes on the matter, and he says we can get 32° in a solid chamber with hollow walls under the brine system.

611. Oh, we need not deal with that, we can deal with that when it comes before us. In reference to your plan, should the mail companies accept it, will it interfere at all with the present refrigerating chambers? Oh no, they can still carry butter, meat, or anything else in the chambers. There will not be the slightest interference. They would not have given the information they have given to our engineers if they did not think they could accept it.

612. Do you believe in having a trial shipment of fruit on the principle of the induction of air, and the fan system of taking out the foul air on the other side? Not without cooling and drying the air. The heat in the tropics is humid, and we propose to cool and dry the air.

613. How would it act if fruit were carried home on deck in small quantities? It would have to be in small quantities. You can carry one case very easily almost anywhere, but if you have got a lot of cases of apples together it is a very different thing.

614. Then, you are of opinion that an experiment would not be successful on the principle of the induction of atmospheric air—that is, pure air taken in and the foul air taken out—without cooling? It is possible that a small quantity of apples might be carried successfully, but the fruit would ripen and its value would be discounted very seriously. In one case where the *Cuzco* carried fruit in that way it turned out very badly. It was carried in the steerage part of the vessel.

615. I want you to understand: a ship going through the water will send air through the ventilators, but if it happens to be a strong fair wind, that is counteracted by the windsails the other way, and you don't get such a free circulation as if the air were drawn in by fans, are you not of opinion that with a fan drawing in atmospheric air, that it becomes much cooler at the bottom than when it comes in at the top of the ventilator? I can't say, and I don't know why it should be. The tendency on board steamships is for the air at the bottom of the vessel to get hotter than it is, say, in the centre of the ship. Air in motion has a cooler effect, you know.

616. What is your opinion as to an alteration in the business of the Agency-General in London? Well, we only argue that from one standpoint, our own trade. The growers, as consignors, are practically out of the London fruit trade. We have, say, 60,000 cases to ship, 59,000 of them will be our own property as principals. In relation to the London fruit trade the growers do not exist, as far as we are concerned. We prefer to do our own business as we have done hitherto.

617. Then, your opinion is that there is no occasion for a commercial agent? As far as we are concerned there is no necessity for it; we have our own men. When the Victorian agent went home he said "the Government can do nothing here; the work must be done at the other end." I believe the people in London are honest. Such firms as E. Jacobs & Sons and others admit that they cannot perform miracles. We have their invoices in hand to look at, and if we were not satisfied we would not go on.

618. What is the point, then, looking at it from your standpoint, in which the Government could help the exporters of fruit, say as far as you are concerned? For the present time I should say leave it alone until we see what answer we can get from the mail companies to our proposition. We are not bound to do anything till December. We want to help the trade if we can help it, but we would not force them, or they will not consider our proposals.

619. Then, the Government could not help you at all? They might help with an advance up to, say, 6s. a case, which might or might not be used according to circumstances.

620. Then you, with the other shippers by the mail boats, do you consider your contract is broken, or do you consider it still intact? Oh, it has two years to go. When we put the system of carriage before the mail companies they said that all has been done that could be done. When we say they have not suitable chambers they say they have done all that the system will permit, but if we can suggest a better system they will consider it.

621. Then, it is under consideration whether your contract is broken or not, and it is not finally decided yet? Our position is this: we don't think, under the conditions of contract, they can compel us to fill the boats. Of course, if we went to other companies then they would talk to us. If fruit can be carried successfully we can do it, for we have all the plans ready.

622. Then, if the Government could bring in outside boats, it is not at all probable that our large fruit shippers would be free to help the Government? That is a matter we should have to remit to the mail companies themselves; it would depend on the circumstances of the case.

623. *By Mr. Woolnough.*—Regarding the bushel case, and with a view to the circulation of air, would it be better if it were made the same as used for oranges, with a space between the wood on the sides? We make our cases in that way now. We leave about half an inch in each case from the cover to the bottom. Our cases are thoroughly ventilated.

624. That is not the case with all shippers, is it? It is in all the cases we ship, and it is so with all fruit sent by shippers. There are some growers who cling to the old system of making the wood close.

625. You are acquainted with the way in which they dispose of fruit in England? Yes.

626. Can you tell us as to the business for the north of England—how is that business done? Well, the northern men generally employ buyers in London, and pay them 3d. a case for buying for them.

627. And they buy by auction? Yes, by public auction.

628. The same as any other man? Yes, as any other man would buy.

629. Do you deal directly with the five or six men who rule Covent Garden Market and sell the fruit? Yes, we deal with them directly.

630. Occasionally you will notice in your returns, "one case bad," or "one case half damaged," and so forth: therefore, the inference is that they have some means of ascertaining what cases are damaged—

how do they know? Well, they have the cases before them, and they put wet cases aside, and sell them afterwards. Though the cases be wet, the wet may not injure the apples much. They sell those cases afterwards, some as sound, and others with all faults.

631. Then, they frequently say to the purchaser such and such a case is bad—they do not depend on the word of the man to whom they sold it? In many cases damaged fruit is returned to them. The buyers bring back the rotten fruit and shoot it out in front of them on the steps.

632. They can't examine all the cases themselves? No; they would not have time in dealing with a large cargo to examine the whole.

633. Are you of opinion that the present mail boats' refrigeration of meat system is essential to the preservation of fruit? No, frozen air should not be used—we hope to get out of that system.

634. It is not essential, and is sometimes hurtful? It is always hurtful. It is all right for meat; but we want cool fresh air. The Tasmanian Agent-General said that in his Report. Refrigeration may be necessary to cool that air.

635. Have the mail companies' been approached and asked to modify their system to suit the fruit? Oh yes, we have discussed it over and over again, and they are always anxious to improve the system.

636. Then, they are not hostile to the introduction of new methods? By no means—they are always anxious to do anything to carry the fruit well.

637. But any scheme proposed should be additional to the present system; they need the present system for meat? Yes, they need the present system for meat.

638. Then, any new system would really be to get rid of the evils connected with the present refrigeration system? Yes.

639. Do you think that could be done more easily by a system suited for apples alone—a system that would not be necessary for meat? You are suggesting that the system should be different for meat—is what you propose additional to the refrigeration system? Not exactly additional, although it is an addition to that system which would enable them to carry a part cargo of meat and part cargo of apples. They can't do that now. If they have meat in the vessel they must use frozen air, and we don't want it. We propose a system by which they can freeze the meat in one part of the vessel and yet give us cool air for the apples in the other.

640. Have you considered the question of having a better system quite different altogether from the present? I don't think it would do, on account of the regularity of the mail service. If they can do the work and give satisfactory carriage, which, I think, they can by weekly steamers, the mail service is the best. As to whether they could reduce the rates more than they have done is a question.

641. I assume it would be acceptable if we could have regularity and lower rates combined? Oh, of course, if we could have regularity and lower rates it would be better.

642. *By Mr. McWilliams.*—How long, at present, has the export of apples been going on from Tasmania to England? Since the date of the International Exhibition—I don't remember the time.

643. Nine or ten years? Oh, quite that.

644. What is the condition of the trade at the present moment? Well, the trade this year has received a severe check. Those who sent fruit are losers. They bought the fruit from the growers and paid good prices for it, and they lost a good deal of money over it.

645. Do you consider after eleven years' experience that the system adopted has been successful? No, I don't, but we have got to the bottom of the cause as we never did before, and we know how to remedy the evils.

646. With eleven years' experience, and having seen the disastrous results, yet you recommend that nothing should be done? No, I would not recommend that, or I should not have spent money in preparing plans for an alteration of the system.

647. Have the mail companies ever tried to adopt your suggestions? Yes, they have accepted all that has been suggested practically. They put in exhaust fans, they put battens between every box to allow a current of air to pass, they covered up all spots likely to be affected by wet with tarpaulins. They have done all they could.

648. And yet, with all that, the fruit has been carried worse than at any other time? No; I don't say worse, but quite as bad.

649. Do you think the mail companies make the fruit trade subservient to the larger passenger and goods trade?—has that any effect on the carriage of fruit? I can't see how it can. When they carry apples they don't carry meat. They refuse to take meat carcasses when they carry apples. They endeavour to carry the apples well. Say a vessel is fitted up for the carriage of meat, the engineers have to arrange so as to produce only frozen air, and frozen air is the cause of the trouble with fruit.

650. Do you not think the trouble is due to the fact of their trying to adapt to the fruit trade appliances prepared for an entirely different trade? There is no doubt about it. They try to adapt their appliances to a work for which they are not suited.

651. Speaking from the present standpoint, would it assist the producers if the Government would endeavour to enter into a contract with a company to carry fruit home by offering a guarantee of freight? That would require them to risk having the fruit. There is the position. When a vessel leaves here we have perhaps not more than 150,000 cases of good fruit. It is not in the country, and we have to scrape it up. Every case we can get we buy. We paid at the Huon 2s. 6d. a case for fruit. We said, "Take the cases to the orchard; take the boxes under the trees and fill them, and there are your half-crowns." If we got it home for 2s. 3d. freight, what effect would it have in Tasmania? Victoria has cheaper fruit than we have; South Australia the same. I bought splendid apples in South Australia at 2s. 3d. the bushel case. If we get cheaper freight the effect will be to run the trade into the hands of the Victorian and South Australian producers; we have not enough fruit here.

652. If they can produce cheaper the higher we make the freights the better their chances, is it not? No, as it is now we get the tonnage, don't you see? They have a Government bonus of say a shilling a case; well, if they get 2s. 3d. for fruit with the Government bonus, they simply get all the benefit there is in it.

653. Then, you think it would be to the detriment of Tasmanian producers to reduce freight? It would all depend on the amount of tonnage put on. Suppose you said there was tonnage for 200,000 cases of apples, we would say we don't want any at all, because that would mean a reduction in the value of apples in London, and it would be useless to put anything into it.

654. You think that the commercial agency in London would be of no value at all? It would be of no use to us.

655. You know, of course, what Mr. Sinclair has done for Victoria: would it not be possible for an agricultural agent for Tasmania to do the same? In what way has Mr. Sinclair done so much for Victoria?

656. Why, by finding a market for the people: is it not so? The fruit is sent there to the agents now, just as ours is.

657. Well, but has he not opened up markets for it in different parts of England? Then, why does the Victorian Agent-General in London advise the Government that an agent can do nothing for them, and that attention must be given to the business at this end?

658. Then you think the best thing we can do for the industry is to let it alone? Well, I don't like to put it that way. That would seem that I am opposed to reform. I can simply say that 95 per cent. of the fruit is now bought out and out from the fruit grower, and the money is paid in cash. By concentration we have tried to put the fruit on the market in a better state. We take the fruit as it comes, and grade it and classify it, and put our own name on it. Buyers will not give the same price for a lot of small lots as for fruit properly put up and graded. If it is possible to go on with the business, for our own sakes and the good of the country we will try to go on, but if we can't, then the fruit will have to go from the growers. If they like to put their fruit into experiments of this kind let them do it. If the Government would stand by them and say they would pay for the freight, and if the fruit did not go wrong, then it would be all right.

659. Do you think there would be any risk to the producer if the Government guaranteed the freight? Only the loss of the fruit, the same as it is this year. Take the case of the *Ballaarat*. It is a question if her cargo cleared the freight.

660. Would they not be in a safer position than you. The result would be that Government would guarantee the freight, and they risk the fruit. At present you risk the freight and the fruit too? The grower would not feel less liable than at present, as if there was a loss now we should have to pay it from our money.

661. Do you think there would be any risk to the Government in guaranteeing the freight? I don't think so.

662. You think that in almost every case the fruit would realise the freight? Yes, in the majority of cases.

663. *By Mr. Smith.*—Would the guarantee of freight add to the profit of the producer? Yes, if the agents at the other end did not take advantage of it. Some people think they do. They know what we pay. We formerly paid 4s. 9d. a case, and the results were better than under a 3s. 6d. freight.

664. How do you account for that? The importer of an article has means of doing it. Then at the time of which I speak the competition from America was very great.

Mr. Peacock here submitted plans of his proposed system, and explained them to the Committee. Under it a system of copper tubes brings down air from the deck, which is cooled in its passage through the tubes.

665. *By the Chairman.*—How long do you think it will take to cool the hold? Well, if 40,000 cubic feet, by our plan we can cool the hold three times in 24 hours. It would take a ten-ton ice machine to do that, but we cool from the start. The engineers have all our plans and data. Those who have the matter in hand say that the plan will be entirely successful.

Mr. Peacock withdrew.

The Committee adjourned until 11 o'clock next day.