

1901.
NEW ZEALAND.

RAILWAYS COMMITTEE.

REPORT ON THE PETITION OF SAMUEL VAILE, TOGETHER WITH COPY OF PETITION,
MINUTES OF EVIDENCE, AND APPENDIX.

Report brought up 30th October, 1901, and ordered to be printed.

ORDER OF REFERENCE.

Extract from the Journals of the House of Representatives.

WEDNESDAY, THE 3RD DAY OF JULY, 1901.

Ordered, "That a Committee be appointed, consisting of ten members, to examine into and report upon questions relating to the railways, with power to call for persons and papers, three to be a quorum; the Committee to consist of Mr. Flatman, Mr. Lawry, Mr. Massey, Mr. Morrison, Mr. McGuire, Mr. R. McKenzie, Mr. G. W. Russell, Mr. Tanner, Mr. J. W. Thomson, and the mover."—(Hon. Sir J. G. WARD.)

PETITION.

To the Honourable the Speaker and Members of the House of Representatives
of the Colony of New Zealand in Parliament assembled.

THE petition of the undersigned Samuel Vaile, of the City of Auckland, in the Colony of New Zealand, humbly sheweth:—

1. That an impression prevails that it is the intention of the Government to make serious alterations in the method of administering the railways of the colony.

2. That for the last nineteen years your petitioner has made a careful study of the railway problem, and is the inventor of the stage system of railway administration.

3. That adaptations of this system, under the name of the "zone system," have for many years past been working in Hungary, Austria, Russia (including Siberia), Prussia, and some other countries, and have invariably given satisfactory financial results.

4. That in the countries mentioned, owing to the arrangement of the stages or zones having tended to attract the population to the great cities, the general social result, as your petitioner anticipated, have not been as satisfactory as the financial results.

5. That the concentration of population curtails transit traffic by destroying the smaller trading centres, and thus decreasing the number of points to which people and goods require to be carried.

6. That the recent census proves that this process is going on here, and that many of our smaller towns are losing their population.

7. That the main object of the stage system as laid down by your petitioner is to do away with this evil, to promote settlement in the country, distribute population, and so not only produce better social results, but also an increasing and permanent railway revenue, which must result if more trading centres are created by giving thinly populated districts temporary, but not permanent, protection.

8. That your petitioner's study of the railway question enables him to state with certainty that any system of through rates that does not take the location of population into account, and fix the charges accordingly, must ultimately produce bad results by concentrating population at the points those through rates protect.

9. That no mere reduction in charges can produce any permanent good effect, because prices soon adjust themselves. What is wanted is a complete change of system.

10. That the stage system is the only plan before the public by which railway rating can be reduced to a scientific system, and the charges made fixed, and the same in every district.

11. That your petitioner says that by adopting the stage system of administration it would be easy to add £1,000,000 per annum to the railway revenue, and that without materially increasing the working-expenses.

12. That ever since the investigation of 1886 your petitioner has been persistently refused a hearing before any of the numerous Railway Committees set up, and consequently has not been able to render the Government and the country the service he has desired to.

13. That your petitioner has never sought any personal, local, or party advantage in this matter, but has always been anxious to assist the Government in power and the country to the very best of his ability.

14. Your petitioner therefore prays that, if any alteration is made in the system of administering our railways, the system proposed by the department may be tried on one section, and that simultaneously the stage system, as designed by your petitioner may be tried on the Auckland Section, so that the community may have an opportunity of judging which system is best adapted to meet its requirements.

And, as in duty bound, your petitioner will ever pray.
Auckland, 22nd June, 1901.

SAMUEL VAILE.

REPORT.

THE Committee recommends that, as the subject of the petition involves a matter of policy, the petition be referred to the Government for consideration ; also, that the evidence taken before the Committee, together with the departmental reports on the petition and evidence, be laid on the table of the House, and be printed.

30th October, 1901.

R. McKENZIE, Chairman.

MINUTES OF EVIDENCE.

(Mr. W. F. MASSEY, ACTING-CHAIRMAN.)

FRIDAY, 6th SEPTEMBER, 1901.

Mr. SAMUEL VAILE examined. (No. 1.)

The Chairman : Mr. Vaile, I understand you wish to speak in support of your petition and of your scheme. The Committee will now hear anything you have to say.

Mr. Vaile : Sir and gentlemen,—I would like, in the first place, to say this: that since the inquiry into this stage system of railway administration in 1886 there has been a very great change in many things. It is now nineteen years since I first placed this system before the world—that is to say, it will be nineteen years on the 3rd January next—and it is fifteen years since the inquiry was held into this system, viz., in 1886. Of course, as I said, during that time there have been very great changes taking place in many things. Then it was a question of my theory, and my theory only; and I am not in the least surprised that the system met with a great deal of opposition, for it seemed to be absolutely absurd to say, when, for instance, you took the Auckland Section, the existing fares to Te Awamutu being at that time £1 5s. and 18s. 9d. for first and second class, and I proposed to reduce them to 3s. and 2s., and asserted that two of the lower fares would give a better financial result than one of the existing fares—the thing appeared so absurd that it was perfectly natural that people received such a statement with a great deal of caution, and I was not at all surprised at even the derision that followed. Never having done any public work of any kind, I did not feel competent to deal with it efficiently, and wrote to Sir Harry Atkinson, Sir George Grey, Mr. Macandrew, Mr. J. C. Firth, and some ten gentlemen in all, asking them to take the idea up; but, to my amazement, I never got a single reply, or even an acknowledgment, from any one of them. In considering it, I came to the conclusion that they simply thought I was “a shingle short,” and afterwards, in conversation with Mr. Macandrew, he candidly told me that that was really the conclusion he arrived at—that some lunatic had written to him. Finally I had to take the matter in hand and deal with it myself. Nobody feels more keenly conscious than I do that I made many mistakes. Having to launch out in public life with the biggest subject in the whole colony, and probably in the whole world, to begin with, it was rather a trying position that I was placed in, and all I ask is that these things be borne in mind by the Committee. The work before me was a very difficult task, and I could only devote the time after 7 o'clock in the evenings to it; and not having time to revise and rewrite my matter—not even having the assistance of any secretary—it was impossible for me to avoid falling into many errors which, after considering and rewriting, I should have avoided. What I devoted my time and attention to was making sure of my facts and figures. Literary effect was a matter of secondary importance. However, I did the best I could at that time. The members of the Special Committee of 1886 were exceedingly good to me. They gave me a most patient and exhaustive hearing; and I need not remind you, gentlemen, that that was a very powerful Committee. The end of it was—may I remind you that at the opening of the inquiry, with the exception of Major Atkinson, I believe nearly every one of the Committee were hostile to my measure, yet they reported: “The Committee, bearing in mind the great importance of the subject, recommend a trial should be given to the system on an isolated section of our railways.” To that report they attached conditions which were impossible to comply with. These conditions, I have been informed, were attached at the last moment. They were brought up at the instance of Mr. J. B. White, one of the most hostile men in the whole country to the new system. He has himself said in print that they were brought up at his instance and attached to the report, and they practically barred the system from being tried. At that time nothing whatever of the kind had been proposed in the world; and so it was simply my theory, and my theory only. That I was right in the theory has been proved by the course of events. You will see that, six years after it was placed before the public here, the Hungarians adopted it in a modified form. I need not go into all the particulars now; they adopted it, and it has been a marked success in that country in every way. It excited much ridicule when I proposed to carry people from Waikari to the Bluff for 12s. 8d. second class, or 18s. 6d. first class, the then fare being, first-class, £4 10s. 11d., and second-class, £3 0s. 9d. It was no surprise to me that the department went against it. It was no surprise to me that the public generally were not impressed. They all thought I was wrong; and I may tell you, in 1885, when I left Auckland for the South, and

when I first had the honour of meeting Sir Joseph Ward, I gave lectures throughout the country, and Sir Joseph will no doubt remember the incredulity with which the Invercargill Chamber of Commerce received the statement at first. I had a terrible fight with the Chambers of Commerce; they thought I must be wrong on the system of averages, and said so. Many of the gentlemen on the committee of the Chamber of Commerce at Christchurch thought I was wrong, and it was only on a second occasion of meeting them they admitted that I was right on the question of calculating the averages. I never felt the least angered at the opposition I met with, and was only surprised I got on as well as I did. However, the matter being one of very great importance, I stuck to it, and worked at it to the best of my ability; and those present will know that from time to time it has commanded a great deal of attention in Parliament, and I hope the time has now come when we may really try the system and see if there is anything in it. One of the most striking proofs that shows I have been right is that afforded by Russia and Siberia. Mr. Ronayne will no doubt be aware of the fact that in Russia, for 200 miles from the chief centres, they have retained the old system, and are charging the old fares and rates. After 200 miles the zone system comes in, and by means of this system they have been able to do things which could not possibly have been done without it. In Siberia there are 5,000,000 square miles of territory, and at the time they started the zone system there were less than four millions and a half of people occupying that enormous territory. I think that is a complete and satisfactory reply to the question of whether the stage system is adapted to a thinly populated country. There is a work published by a Mr. Arnot Reid, in which he speaks of this system and its working in Russia and what it has done. This is what he says about the management of the Trans-Siberian Railway: "The whole country traversed by the railway is divided into zones of a certain mileage, and the charge for travelling is so-much within each zone, without regard to the actual distance the traveller may proceed. The zone system is by no means peculiar to Russia, but is, I think, carried out, unless my memory leads me wrong, in Austria and elsewhere with much success. It has been found to be an exceedingly useful system for developing the use of railways by populations that are new to railways; and, while I do not suggest that it is in any way applicable to Britain, it is a system that I should be inclined to recommend on any new railway in any new country." As I understand this matter, on the 1st December, 1894, the Government of that country applied the zone system to their railways for all distances exceeding 200 miles; for all shorter distances from their large centres the old system was retained. The passenger revenue of the Russian lines for the previous year had been £8,061,754, but the Russian railway experts calculated that the introduction of the new system would reduce the year's revenue to £6,167,552; it, however, wound up with £9,183,333, or £1,121,579 more than the previous year, and £3,051,781 more than the railway experts calculated on. I may mention that copies of my pamphlets were sent to the British Consul and Ambassador at St. Petersburg some years before this took place. So that the progress of events in the world has shown that the main financial theory on which I worked has been correct. With regard to fares, I proposed to reduce the passenger fares generally to, as nearly as possible, an average of one-fifth of the then charge, and in Hungary they adopted that exact figure. I have that on the authority of the Hungarian Minister, that that is the proportion on which they worked. They undertook to reduce to an average of one-fifth, and the result has been a most marked success. Well, in laying down the new system I had to bear in mind that at that time the universal statement was that railways were "commercial institutions" and must be made to pay, and that influenced me somewhat in the way I laid down the position of the stages, and the Hungarians and others have followed that plan. I have since published that I did not think the system was quite right from a social and land-settlement point of view, but I was tied down to it by the question of finance, as I knew it was useless to advocate any reform that would not give an immediate paying result. My contention has always been that the roads of a country absolutely govern it, and that railways, wherever they exist, are pre-eminently its great highways, and therefore we ought to devote our most special care and attention to their administration. I have never considered that the question of direct payment should be the first consideration to be thought of in using a railway; I believe that they ought to be used for the promotion of land-settlement and the convenience of the inhabitants far more than they ought to be used for the mere purpose of making money. But I take up this ground: that if they were really used for the convenience of the public they would pay an amount of revenue that they cannot possibly be made to pay under the present system. I consider that the permanent-way of the railway should not be asked to pay interest on the cost of its constructions any more than the macadamised roads should pay interest. As regards macadamised roads, the users do the conveying themselves or pay somebody to do it for them, therefore it is perfectly right that on a railway there should be a charge for the conveying, and that charge should include a fair profit; and if we only looked to that the profit would be so enormous that not only would it pay interest on the railways constructed, but it would also give us a sufficient sum of money to go on constructing railways out of revenue. I am as certain of that as I am of speaking here now. Of course, when I was giving evidence before the last Committee I had not the opportunities that I have now, and the officials of the Railway Department, of course, had largely the advantage of me in many ways. Now, here is the return, which we all know something about:—

Evidence produced at the Parliamentary Inquiry into Vaile's Stage System in 1886.

What the Government Railway Accountant proves would be the Financial Result by adopting Vaile's System of Railway Fares and Charges.

NEW ZEALAND RAILWAYS. Summary of Passengers carried on the Auckland Section, under different Stages (Helensville to Morrinsville), for the Twelve Months ended 31st March, 1886.							STATEMENTS MADE As to what Mr. Vaile's Average Fare for the Distances named would be.				
Distances.	Present Percentage of Travellers at these Distances.	Percentage of Revenue they now have to pay.	Total Number of Passengers carried at Government Fares.	Total Revenue.		Number of Passengers computed to give the same Revenue at Mr Vaile's Fares.		What this Table says.	Samuel Vaile's Statement.	J. P. Maxwell's Statement.	Mr. Hannay's Statement.
				£	s. d.	Equal Numbers of each Class.	Two First Class to one Second.				
Not exceeding 3 miles	* Travellers of these distances are 68·8 of the whole	* 24·1	55,518½	1,215	12 1	59,588	55,860	* 5·15d.	* Not less than 5d.	* Average for 9 miles and under not more than 5d.	
Over 3 and not exceeding 5 miles			94,781	2,801	17 5	130,100	121,975				
Over 5 and not exceeding 7 miles			96,604½	3,435	2 0	157,176	147,356				
Over 7 and not exceeding 10 miles			46,045½	2,144	4 3	60,012	56,259				
Total of 10 miles and under	..	..	292,949½	9,596	15 9	406,876	381,450	5·66d.		Could not be more than 4½d.
Over 10 and not exceeding 30 miles	* These are 25·3	* 39·2	75,562½	8,324	10 10	194,445	182,292	* 1/5½d.		"In the country districts is only 4½d. for 50 miles"	
Over 30 and not exceeding 50 miles			31,640	7,322	17 6	81,842	76,731				
Over 50 miles	..	..	24,762	14,665	13 1	134,291	125,900			"For all distances over 10 m. most unlikely to average 1s. 1½d."
Gross total	..	..	424 914	39,909	17 2	817,454	766,373	11½d.	1s.	"I do not think the average (for all distances) will be 1s."

All the columns marked thus * have been added by S. V.

Accountant's Office, Wellington.

A. C. FIFE, Accountant.

I tried to get this return many times before the special Committee was set up, and also during the earlier stages of the Committee, and the reply of the department was that it would take at least six months to prepare it, and that it would cost at least £1,000 to produce, and that it would not improve my position when I got it. The return in question is a return of the passenger fares taken from every station to every station on the Auckland Section of railways as they existed in 1886, and is prepared to the 31st March of that year by Mr. A. C. Fife, Accountant, and it was ordered to be prepared by the Railways Committee. Now, this return is a most important one, and it is one that I am certain, if I had had it in time to make use of while the Committee work was going on, they (the Committee) would have given an unqualified report in favour of a trial of the new system. I might mention in passing that that inquiry was a most lengthened one, and that I believe I have been blamed a good deal for its length. Anybody who will peruse the evidence will see that its length was caused by the enormous number of questions which I had to answer. I was in no way responsible for the length of that inquiry, and I am afraid that its length debarred me from being heard again until now. For the last fifteen years I have been trying to be heard before a parliamentary Committee, but have not succeeded until this occasion. Personally, I feel very grateful to this Committee for affording me the opportunity of being again heard. Now, with regard to this table, my object in getting it was to show that my finance was sound. It was brought up after the Committee's work was closed, and I would like to direct your attention to a fact here. The Committee had ordered this to be prepared, but the work of the Committee was closed—except bringing up the report—before they got it. That work closed one Friday afternoon, and I heard on the Saturday that this table had been produced, and went to the office and got a sight of it, and got in one very short memorandum about it. That was all I had a chance of doing with that return. One of the questions that arose before the Committee was, What was the relative proportion of second-class fares to first-class fares under the existing system, and what would be the relative position under the new system? I showed the relative proportion was two and a half second-class to one first-class fare, and claimed that under the new system that there would be at least an equal number of each class, and said that there would probably be a great many more first- than second-class fares. However, I only claimed an equal number of each class. Well, the first report that was brought up to the Committee is this summary of the passengers [produced], which you will find in the Parliamentary Paper I-9, page 87, 1886. This report was made on the same proportion of passengers that were then existing—that is to say, the two and a half second-class to one first-class fare. The Committee declined to receive that as sufficient, and they ordered the return on page 89 to be brought up. All this took place after I had finally left the Committee's room. I only saw the one on page 87, but I could see that even that proved that I was right. The new return ordered—that on page 89 of the minutes of evidence—showed, in the first column, equal numbers of each class of fares, and, in the next, two first-class to one second-class fare. The majority were of opinion that under the new system there would be considerably more first-class than second-class fares—most of them thought more than double—hence they ordered this report. For my purposes I have always stuck to my original

idea of the equal proportion of each class. This is how it worked out. What I assumed was that my average fare would not be less than 1s. But first let me point out to you, gentlemen, that, whether you work by miles or whether you work by stages, the longer distance a passenger travels the larger fare he must pay; no matter whether he travels by the stage or by the mile, and therefore my object was to extend the average distance travelled. If you can extend the distance travelled you must get a bigger income. I found out the average distance then travelled was thirteen miles. The last time I worked it out it was a trifle under thirteen miles. It has not increased during the last fifteen years, and I think that of itself is a sufficient condemnation of the system we are working under. Having found the average distance travelled was thirteen miles, and the thing being an entirely new one, and having nothing whatever to guide me as to what extension in travelling was likely to take place, I simply calculated on an extension of from thirteen to fifteen miles. Well, then, this is how I had to lay down the system of stages: Say, this being Auckland, I put the first point at seven miles and the next at fourteen miles from that city, thus fifteen miles, would land my passenger in the third stage. Assuming there were equal numbers, that the second-class fare was 1s. and the first-class fare 1s. 6d. for the three stages, the half of that would be 1s. 3d., and I calculated my average fare at 1s. 3d.; but, I said, there will be a considerable disturbance of that by means of the wayside traffic. The stations between the stages would, of course, disturb that calculation, so I took off the odd 3d. and said I would merely reckon on the 1s. When Mr. Maxwell sent his report into the Committee my diagram had been hanging before him for many days, yet he deliberately sent a report to the Committee, in writing that my average fare for ten miles and under could not be more than 4½d. His own accountant shows that it was 5.66d. Where there are millions that is a very big figure. He said, in country districts it was only 4½d. for fifty miles. Where he got those figures from I do not know, and how he arrived at that conclusion I have never to this day been able to understand. His own accountant shows that the fare for from ten to fifty miles, that Mr. Maxwell stated would be 4½d., is 1s. 5½d. Now, that is a pretty big figure for a railway expert to be out in; and he said for all distances over ten miles the fare is most unlikely to average 1s. 1½d. Where he got that 1½d. from I do not understand. The same gentleman accused me of very great ignorance in dealing with my subject. Mr. Hannay also gave evidence, and said the average for nine miles and under could not be more than 5d., while their accountant shows the average for ten miles and under is 8.57d. Mr. Hannay further said, "I do not think the average fare for all distances will be 1s." Now, I ask, was I not justified in saying some very hard things about the railway officials who gave evidence of that sort to the Committee? I think I was. It was the only course left open to me. My contention was that the fare would be 1s.; that if we got two fares where we got one, and these fares were not less than 1s., we must make money. Here is their own return—viz., that there were 425,000 passengers carried, in round figures, and they produced, in round figures, £40,000. To produce the same revenue under my system the number of passengers required would be 817,454. Well, twice 425,000 is 850,000, showing clearly that if I got double the number of passengers I should get an increased revenue, and that the departmental return justified my statement. I have had nothing to do with that return, and never saw it until I got it in print. Now, then, gentlemen, you will find Mr. Fife says that without any extension in the distance travelled my average fare will be 11¾d. Now, Mr. Maxwell spoke of me as an amateur, and all that sort of thing. I want to know which showed the greatest knowledge, the amateur or the railway expert. However, these things are past and gone, and it is only necessary I should draw your attention to them in order to show you what I had to contend with on that Committee. Another claim I made was that the system I proposed was so much more simple than the present system that it would encourage travelling greatly; that it would encourage not only travelling, but the sending of produce and goods, because everybody could understand it; and it would be a fixed scientific system that everybody could grip, lay hold of, and understand. Well, the whole of the three officials endeavoured to controvert that opinion; but I must do Mr. Grant the justice to say that he never gave any evidence as to what the average fare would be, nor did he give any evidence as to the simplicity of the new system. I claimed that to be successful in railways you must have not only a cheap system, but a system that everybody can understand. Well, Mr. Hannay and Mr. Hudson both emphatically asserted that this departmental distance-table of the Auckland Section of railways as it was in 1887 was far easier for the officials to understand than the stage system as applied to the same sections in the same year. Well, you had to travel along these long lines of figures in the departmental table, and if dealing with second-class passenger fares you had to reckon the number of miles by 1½d., and they (Messrs. Hannay and Hudson) said that that was easier done, and the public would understand it better, than my system. There are about 23,000 figures in the 105 columns in their system, and in mine there are only fifteen columns and 132 figures. Say you wanted to find the fare from Frankton Junction to Auckland, on the stage system. You have five stations on my table, and five sixpences are 2s. 6d. for the first-class fare, and five fourpences, 1s. 8d. for the second-class fare. Yet they wanted to make out that their system was easier than mine. Then, in Mr. Charles Hudson's evidence, he was questioned by the Hon. Mr. Richardson as follows:—Question 376: "Is there sufficient information given in this scheme to enable you to form an opinion as to how the proposals with regard to passengers would work out in practice?" A. "With regard to passengers, I think it would be necessary to make a rate-book for every station. We cannot ask the ticket clerks to count up the number of stages to arrive at the fare: it would be necessary to give them a rate-book stating the rate from their station to every station they were allowed to book to." Q. "Would that be a great simplification of the present system?" A. "No, it would not be so simple." Q. "Hon. Major Atkinson: But the passengers would understand it more easily, would they not?" A. "I do not think so, because we publish a mileage fare and they have only got to refer to the time-table for the number of miles to calculate the fare to any station they wish to go. Then, in addition, we post up in our stations a clear table giving the passenger, parcels, and other rates to each point from that station. There would be no difference so far as the public is concerned." Q. "Mr. Maxwell: How long do you suppose it would be before the rate-books could be got in proper order?" A. "I do not think, on serious consideration, you could start in less than

a year." Q. "And a very large outlay would have to be incurred all over the system?" A. "Yes, undoubtedly." That is Mr. Charles Hudson's evidence with regard to simplicity. Gentlemen, I worked out my table in one evening and Mr. Hudson told the Committee it would take a year to do it. All you have to do is just to put a printed copy of my table on the walls of platforms and stations—and I want to know where the large outlay comes in. That is the class of evidence that I was defeated on in the last inquiry. I think it is necessary that I should show you what kind of evidence I have been beaten by, and kept back in this matter. Mr. Hannay gave similar evidence, which is as follows:—Question 574: "Mr. Macandrew (to Mr. Hannay): Assuming that the charges under Mr. Vaile's system were regulated to yield as much revenue, would you consider the system preferable?" A. "No; I do not see any kind of advantage in it." Q. "Would it not be simpler?" A. "No; of course, Mr. Vaile himself has said that he has not gone into details, but there is nothing I can see in the general plan to make it simpler." Q. "I understand, then, that not only would there be no advantage from the change, but you are of opinion that there would be a decrease of revenue?" A. "That would, of course, entirely depend upon what the rates were; but I think there would be a decrease of revenue." Question 608: "Hon. Mr. Richardson (to Mr. Hannay): Comparing the stage system with the present mileage system, which do you think would be more easily understood by the general public?" A. "I do not think the stage system would be any more intelligible. As a matter of fact, passengers' fares are now posted up outside every booking-office, and the passenger has only to refer to it." Q. "Mr. Hudson stated that it would be absolutely necessary to have rate-books at every station?" A. "That is so. Each station would require to be supplied, because the rates from every station would be different." (This statement of Mr. Hannay's is absolutely incorrect. The rates are the same from every station.) Q. "Mr. Macandrew: Would not the rates have to be posted up under the stage system?" A. "Yes, to be intelligible to the public." Q. "Hon. Mr. Richardson: Then, under the present system one scale of rates answers the purpose all over, and in the other case a special list would be required for each station?" Mr. Hannay made no reply to this question, but left it to be believed that that would be so. Now, this departmental distance-table of the Auckland Section of railways as it was in 1887 contains 105 columns, comprising between them 22,930 figures, and rendering necessary the calculation of 11,025 different fares for each class of passengers—that is to say, taking first- and second-class single, and first- and second-class return, 44,000 different tickets for only 236 miles of railway. The distance-table under the stage system which I prepared for the same section and stations, as will be seen, contains only fifteen columns, comprising between them but 132 figures, and with only 144 possible charges to calculate; and if the use of distance tickets is discontinued and stage tickets only used—which is what I should prefer—then there would be only four different tickets for each class in use on the whole of the New Zealand lines. Yet Messrs. Hannay and Hudson deliberately gave evidence that the stage system was the most complicated of the two. I compiled the stage-distance and fares table shown here in one evening.

Stage System Distance-table applied to the Auckland Section as it was in September, 1887.

Stage Stations.	And for following Intermediate Stations:—	Helensville	Waimauku	Taupaki	Henderson	Mount Albert	Auckland	Penrose	Manurewa	Drury	Pukekohe	Frankton Junc.	Te Kuiti	Te Aroha	Oxford	Cambridge	Litchfield
1 Helensville ..	Ohirangi — Paeroa — Woodhill — Rewhiti — Waimauku																
2 Waimauku ..	Kumeu—Taupaki	1															
3 Taupaki ..	Waitakerei—Swanson—Henderson	2	1														
4 Henderson ..	Waikomiti—New Lynn—Avondale—Mount Albert	3	2	1													
5 Mount Albert ..	Morningside—Kingsland—Mount Eden—Auckland	4	3	2	1												
6 Auckland ..	Newmarket — Remuera — Greenlane — Ellerslie — Penrose	5	4	3	2	1											
7 Penrose ..	Te Papapa — Onehunga — Westfield — Otahuhu — Papatoitoi—Manurewa	6	5	4	3	2	1										
8 Manurewa ..	Papakura—Hunua—Drury	7	6	5	4	3	2	1									
9 Drury ..	Runciman—Paerata—Pukekohe	8	7	6	5	4	3	2	1								
10 Pukekohe ..	Buckland — Tuakau — Whangarata — Pokeno — Mercer—Whangamarino—Wairangi—Rangiriri—Ohinewai—Huntly—Taupiri—Ngaruawahia—Pukete—Te Rapa—Frankton	9	8	7	6	5	4	3	2	1							
11 Frankton Junc.	Rukuhia — Ohaupo — Lake Road — Ngaroto — Te Awamutu—Te Puhi—Kawa—Kiokio Otorohanga—Hangatiki—Te Kumi—Te Kuiti	10	9	8	7	6	5	4	3	2	1						
12 Te Kuiti ..	As above	11	10	9	8	7	6	5	4	3	2	1					
13 Te Aroha ..	Hamilton, E. and W.—Ruakura Junction—Eureka—Motumaoho—Morrinsville—Murray—Tatua—Waitoa—Waihou—Te Aroha	11	10	9	8	7	6	5	4	3	2	1	2				
14 Oxford ..	Hamilton, E. and W.—Ruakura Junction—Eureka—Motumaoho—Morrinsville—Kiwitahi—Walton—Waharoa—Matamata—Mangawhara—Okoroire—Oxford	11	10	9	8	7	6	5	4	3	2	1	2	1			
15 Cambridge ..	Hamilton, E. and W.—Ruakura Junction—Newstead—Tamahere—Fencourt—Cambridge	11	10	9	8	7	6	5	4	3	2	1	2	1	1		
16 Litchfield ..	.. .. .	12	11	10	9	8	7	6	5	4	3	2	3	2	1	2	

NOTE.—In reading this table for intermediate stations, when going from north to south, read from the stage stations in the second column. When going from south to north read from the stage stations in italics in the third column. Remember the fare is to be calculated for each stage station you pass and for the station you arrive at. The figures used in this table are of the same size and character as those used in the distance-table, of which I give a photograve in my pamphlet "Social Problems."

Table of Passenger Fares for the whole of the Auckland Section of Railways.

All goods rates would be calculated in the same manner.

No. of Stages.	First-class Fare.	Second-class Fare.	No. of Stages.	First-class Fare.	Second-class Fare.
1	-/6	-/4	7	3/6	2/4
2	1/-	-/8	8	4/-	2/8
3	1/6	1/-	9	4/6	3/-
4	2/-	1/4	10	5/-	3/4
5	2/6	1/8	11	5/6	3/8
6	3/-	2/-	12	6/-	4/-

All that would be required in actual working would be a printed copy or copies of it for each station. These could easily be supplied in a day; and yet Mr. Hudson was not ashamed to give evidence that, "on serious consideration," he did not think this information could be supplied in less than a year.

Mr. Flatman: Your table serves the same purpose as the departmental table?

Mr. Vaile: Yes, it serves the same purpose; yet I was deliberately told by the railway officials that neither the people nor the railway officials would be able to read it. I hope there will be questions asked of me which will elicit a good deal of what I have passed over. To give the passenger fares from every station to every station on the Auckland or any other section, my distance-plan should be printed and pasted up at every station, with the addition that the first-class fare is 6d. and second-class fare 4d. per stage. There is all the information there in my table to calculate the distance on. A system like that, where a child could go up to the station and read it, would greatly assist travelling and travellers. There was a long discussion went on about the increased cost of carrying the two passengers for the one fare. I contended that practically there would be no increased cost. This statement was strongly combated; but you see what experience has shown. I had nothing but my own theory and calculations to guide me, but the experience of Hungary has shown again that I am right. For many years there was practically no increase in the cost of carrying the people there, and they carried four for every one previously. In the course of examination of Mr. Hannay I elicited this information: "That it would cost £55,000 per annum extra to double the passenger traffic on the Hurunui-Bluff main line only from Waikari to Bluff, without any provision for increased trains on the branches, being nearly half of the whole section, and that they would require to run 312,000 extra train-miles per annum." Then, in the same parliamentary paper—I.-9, 1886—there are the following questions and answers in reference to the evidence given by Mr. Hannay: "601. Mr. Vaile (to Mr. Hannay): Do you consider that our rolling-stock is now fully employed?" A. Certainly not; that is to say, every wagon and every carriage is not run every day full." Q. "Nor anything like full?" A. "No." Q. "Do you think they run half full, taking the rolling-stock all round?" A. "It is fairly employed. In order to give a definite answer to this, I might say that the average number of passengers which are carried on the Hurunui-Bluff line is seven to each carriage." Q. "That shows that they are not a quarter full?" A. "Yes; but you must not entertain the idea that I do not think the carriages are not fairly employed." Q. "You say that the average is seven to a carriage?" A. "Yes." Most of these carriages are capable of seating forty passengers, and Mr. Hannay thinks them "fairly employed" when only carrying seven. Now, I want to draw the Committee's attention to what actually occurred. Not long after giving this evidence Mr. Hannay was appointed one of our Railway Commissioners, and then this is what happened: during their five years' term of office as Commissioners they actually did an *extra* business that was equal to carrying an average of 5,178,000 passengers per annum. They also during this period worked on an average two hundred more miles of railway per annum than was open during the previous five years. To do this large amount of extra work they found it necessary to increase the working-expenses only £28,878, and the train-mileage only 22,457 miles per annum. The actual average annual increase of work done was as follows: Two hundred miles more of railway were opened and worked; 298,277 more passengers were carried; 325,292 more tons of goods and live-stock were carried. The tonnage and extra passengers actually carried are equal to 5,177,657 extra passengers, and there were the two hundred extra miles of railway to be worked in addition. In 1885 the average cost of working each mile of railway was £480. Two hundred miles at £480 per mile is £96,000; but the Commissioners only spent £29,000 per annum extra, so we see that, if their former expenditure was necessary, while these gentlemen were irresponsible Commissioners, for the sake of making it appear that they earned a trifle more interest, they starved our railways to the extent of £70,000 per annum; and, in addition, they further pressed them to an extent equal to carrying 5,200,000 extra passengers per annum. In 1885 the average number of train-miles run on every mile of railway open was 1,951. This for two hundred extra miles would involve 390,200 extra train-miles per annum; but the Commissioners contrived to get through with only 22,457 extra miles, and also did the extra work mentioned above. These, then, are the indisputable facts, and yet Mr. Hannay told the Railway Committee of 1886 that merely to carry another 1,500,000 on the best constructed line in the colony would cost £55,000, and necessitate running 312,000 extra train-miles. I think I am justified in saying that the evidence given certainly misled the Committee. That was the evidence

they gave. There is one thing, gentlemen, I should like specially to draw your attention to, and that is the very unjust way in which the present system deals with the country settlers, and I say that this is the real blot in the railway system, and until it is got over by some means you can never make a real success of the railways. When I started to study this question I studied all sorts of plans of meeting that difficulty by means of through rates. The late Mr. Charles Waring, of London, who wrote the work on "The State Purchase of Railways," tried to get over it also by what he called a "distance scale," charging a much less rate per mile for the long distance than for the short. But that all resolves itself into the question of through rates, which always go to the benefit of the big cities. I should like to draw the attention of the Committee to the fact that, taking the working of that table of Mr. Fife's in 1886, the passengers who travelled ten miles and under formed 68·8 of the whole, and they paid 24·1 of the revenue. Then, if you take from ten miles to not exceeding fifty miles, the passengers were 25·3 of the whole, but they had to pay 39·2 of the revenue. You will see that those country settlers paid a great deal more, and that they were not the most distant country settlers. They paid a great deal more than the town and suburban users of the railway toward the revenue. Then, if you take the distance of over fifty miles, there were only 5·9 of the travellers, and they had to pay 36·7 of the revenue. So that you see that less than 6 per cent. of the community were compelled to pay 50 per cent. more of revenue than the 69 per cent. had to pay. Now, I know, of course, that the short-distance traveller you must have, and that they will pay a less gross sum; but I say the present proportion as shown on this table is altogether out of order, and cannot be conducive either to the good of the railway revenue or to the good of the country. You will find all the details of what I have been saying in Mr. Fife's table. There is another thing I want to draw the Committee's attention to, and that is the census. One of my great objections to this system, and, in fact, my great objection to it, is that the present system concentrates the population in the great cities. I may mention that all my lifetime I have been studying the poverty problem, and I have come to the conclusion that the real cause of the poverty that exists in the world is the inability of the people to make proper use of the land; but how to remedy that I did not see, until other circumstances—questions of business—led me to study the railway problem. Then I saw how intimately the two things were connected. I found it was the railway system that was responsible for piling up the population in the great cities, and decreasing it in the small country towns. During most of the sixties I lived in England, and mainly in London. In travelling over the country there I noticed notifications of butter-markets stuck up here and there; but, on inquiring where they were, I was told that there were no butter-markets there now, but that they were in one of the large centres. You would see notices of cattle-markets stuck up here and there in the same way, but you would find, on inquiring, that all these local markets had been swept away, and had gone into London, Liverpool, or some other large centre. Precisely the same thing is going on now in New Zealand, and with accelerated speed. From the first, I maintained that this would be the result. For instance, take the last census return, and you will find that out of ninety-five boroughs twenty-seven have decreased in population during the last ten years—that is, since the 31st March, 1891; and I want to draw the Committee's attention to the fact that this decrease has taken place most largely in those districts which are best served by the railways, and I take it that that is just a contrary condition of things to what ought to exist. Now, of those twenty-seven boroughs that have decreased in population, nine are in the North Island—two being on the Auckland Section, and seven on the Wellington-Taranaki-Hawke's Bay Section, the latter section being where they have much greater railway facilities than we have in Auckland. Then, if you come to the South Island, you will find that eighteen boroughs have declined in population there, and nearly all of them are on the Hurunui-Bluff Section. In the North Island one other borough is also practically at a standstill—the population is just about the same as it was five years ago—and five more in the South Island are in the same position, showing that a large decrease of the population of these smaller towns has taken place. Now, if you will compare the five years from 1891 to 1895 you will find that all the boroughs then connected with the railways in the North Island increased in their population, while in the South Island several of them decreased. The Auckland Section of railways have not had nearly as much influence on Auckland as the other sections of railway have had on the large towns in the South. I take it that the reason of this is that the railways as they are now worked afford greater facilities for concentration; and I am quite certain about this: that if we let the North Island Main Trunk Railway get through and connect Auckland and Wellington, the fight between Auckland and Wellington will commence for these small towns, and they will be gradually wiped out—that is, assuming you continue the present system. Very well, then, Auckland being the larger and more attractive of the cities, it is pretty certain to win the fight. This question of the depopulation of the country towns is a most serious thing, not only from the social point of view, but from the railway point of view, because you have the less number of carrying points to take goods and people to. The carrying trade between these towns would be very great if you had a number of them. If you take the influence on the whole of the country, it works out thus: In 1891 the county population was 56·18 of the whole, and the borough population 43·82. Take the next census, 1896, and the county population had declined to 55·69, and the borough population had increased to 44·31. At the last census the county population was 54·04, and the borough population was 45·96. So we see this, gentleman, that notwithstanding all our efforts to settle the land the proportion of county population is gradually decreasing, while the proportion of town population is continually increasing. Now, I do not think that is conducive to the welfare of the towns or the country. In ten years the country population, as compared with the towns, has declined 2·14 per cent. During the first half of the decade the population declined 1·49, or less than $\frac{1}{2}$ per cent., while in the latter half it has declined 1·65. Now, the accelerated speed with which the depopulation of the country is going on is a most serious matter and demands close attention. The country is being depopulated and the people piled up in the towns. That

must not only have a very bad social effect, but it must have a disastrous effect upon the railway revenue. I account for the great increase in the depopulation of the country during the last half of the decade by the fact that during this period there have been very many more through rates than there were in the first half. Now, the through rates must operate in favour of the big centres, whatever you do with them, under the present system. It was, I think, in 1895 that through rates were first given on fruit, parcels, &c. The department said it was adopting my system. I have no doubt in my own mind that a very large proportion of the prosperity of our railways during the last five years is due to the fact that we are absorbing the country into the great towns. The same thing took place, if you will remember, over in Victoria, and I fully pointed out that it would be so, and it was so. And they have never recovered to this day the position that they had before. Now, what I have tried to do is to devise a system whereby these evils will not come in—to devise a system by which the railway rates can be fixed scientifically and made the same in every district and be fixed until a general alteration is made all over the colony. And I say, if this could be done, the advantages are very obvious. It would place every district on an equal footing, and so obviate much of the present discontent. It would enable producers to calculate more closely the cost of production, which is a very important item. I find both producers and traders are constantly complaining that they cannot calculate their railway charges. I get numerous letters from all parts of the country about it, so that if we could do what I propose to do we would get rid of a great deal of difficulty. Now, that brings us on to this stage system. If you take the distance from Auckland to Frankton Junction you have eighty-five miles, and under the present system you have eighty-five toll-bars. In all the old railway charters in the United Kingdom this is the phrase used: "the company is hereby authorized to charge a toll of so-much per mile for the transport of first-class passengers, a toll of so-much per mile for second-class passengers, and a toll of so-much per mile for coal and other articles of freight." But the word "toll" is used throughout, showing the connection with the toll-bar in the minds of the framers of the Bills. When the charters were given to these companies it was evident that the idea of the toll-bars was in the mind of the British legislators. Although you do not see them, the toll-bars are there. For every mile they pass over, the goods have to pay, or the passenger has to pay; and consequently, if you are dealing with goods, every mile you pass over takes away from the profit the man has in his goods before he can get them to the market. I sought to do away with that, but I know that you cannot do away with it altogether; but I say you can abolish most of these invisible toll-bars. On the trip from Auckland to Frankton Junction I abolish eighty out of the eighty-five of these toll-bars, and the man at the eighty-five-mile distance would be able to compete with the man at the seven miles, because he would get his land very much cheaper. Of course, he has always got the disadvantage of time against him, which we cannot remove; but we can do away with the multiplication of charges, which weigh him down. I propose to average the charges, and so equalise them more, and place the distant man more on an equality with the man close to. For the purposes of finance I had to place these stages as shown on the diagram—that is, four stages covering from twenty-eight to thirty miles. If I had been quite free, however, I would have put the first stage at seven miles, the next stage at ten, the next stage at fifteen, and the next at twenty-five, and then the fifty-mile stages if the location of population allows it. I think it would be a better adjustment as regards social effects, but I do not think it would be so good for financial effect. However, being tied down to get the revenue, I place them so. Well, I want it to be understood that what I propose to do is only to give these distant points on the long-distance stages temporary protection. I contend that by the system that now obtains we give permanent protection to the big cities. I do not care how you adjust these through rates, the big cities must permanently get the advantage of them. I only propose to give temporary assistance to these distant points. I assume that any man wishing to go into the country, whether he is a professional man or a trader, a mechanic or a day-labourer, would select a point on the lines like Frankton Junction, and settle there, because he could travel from there in five different directions, all over fifty miles in each direction—assuming the lines are open that far—for a fare of 4d. or 6d. first class each journey. This, of course, would give him command of a wide range of country over which he could carry on his business or profession for the same charge. You will see that Frankton Junction occupies a very important position on account of its command of the country in so many different directions. I expect from this the population would rapidly increase round Frankton and all sections of our railway similarly situated, of which there are a good many in both Islands. If this took place, we should create a town there, the trade between which and Auckland would largely increase the traffic of the railways. This I hold to be a most important point. A man could come from Frankton fifty miles along the direct North Island Trunk Line, he could go to Cambridge, or further, if the line were extended, for the same fare. He could go to Pukekohe and to Te Aroha for the same fare, he could go to Tirau for the same fare; and consequently I say that a trader, a professional man, or even a day-labourer or mechanic, is sure to locate himself there, and consequently a town would soon largely increase instead of decrease, as has actually occurred with this town of Hamilton. You would accumulate a population at those places I have mentioned, and if you accumulate a population there you not only make trade for the railway, but you develop local markets for the farmers, which is a very important point, as the local market always pays the farmer best. From all round people would be coming in with produce, and, as I have said, you would not only get the accumulation of people but you would get a large extension of railway traffic. Every stage-station along the lines would share in these advantages to a greater or less degree, and, as I have said, there being several towns on each of our railway sections situated like Hamilton, a large development of railway traffic must ensue, and nowhere would this development be so great as on the Hurunui-Bluff Section.

Mr. R. McKENZIE, CHAIRMAN.

WEDNESDAY, 11TH SEPTEMBER, 1901.

Mr. SAMUEL VAILE further examined. (No. 2.)

The Chairman : You can proceed with your evidence, Mr. Vaile.

Mr. Vaile : Sir and gentlemen,—When we left off on Friday I think I was explaining the position of the stages under this system—that is to say, the adjustment of the stages. I do not propose to fix the first four stages arbitrarily at seven-mile distances apart, but at the nearest distributing-point to that figure. I propose to cover from twenty-eight to thirty miles with the four first stages from any large centre ; but the various stages would be readjusted after each census is taken, and placed in accordance with the movement of the population. Suppose, for instance, round Frankton we had concentrated a population of two thousand—there are about twelve hundred there now—one seven-mile stage would be placed on every line running out of that town. That will make the people round Frankton and Hamilton pay for the first seven miles the same rate as the people who pay for the same seven-mile distance round the larger towns. If on taking the next census the population had increased to four thousand people, then I would put two seven-mile stages out ; and if to six thousand people, then four stages on each side—the effect being that all the large centres of population would pay the same rate per mile, while the long stages, thus shortened, would pay a slightly increased rate per mile, but still considerably less than the shorter stages round the great towns. I think that would be a fair adjustment of the financial charges. It was objected to at the last inquiry, in 1886, that doing this would raise the price of a through fare, and that if you put an additional stage on each side of a capital town or to a town of two thousand inhabitants it would raise the through fare. But this need not be so, because it is obvious that if the alteration in the location of the population allowed you to add 25 per cent. to the number of the stage stations you could reduce the stage fare by 20 per cent., and consequently the through fare would remain the same, but the charge would be more fairly subdivided between the different districts. It does not necessarily follow that because you increase the number of stages you must raise the through fare. If you wished to increase the through fare you could do so by putting in other stages without disturbing the local traffic in the least. Of course, the present system does not admit of anything of that sort. Then, another proposition that I made was that the present system of issuing tickets should be abandoned, there being only on the stage system an issue of four tickets. It would be quite easy to make these so far in the nature of stamps that they would not be easily counterfeited, and they would be issued wherever postage-stamps are issued now ; and this would consequently save a great deal of crowding at the stations and lessen the work of carrying on railway traffic. In Germany, where they have recently adopted the stage or zone system, they have a penny-in-the-slot system on the stations, where the people put in the coin and get out a ticket for one, two, or three stages as they want them. Of course, it saves a great deal of work. Then, again, I propose to largely simplify the goods classification. My idea would be to reduce the goods classification to four classes, with a fifth for dangerous goods ; this would simplify the classification very much. I would do the same thing with parcels rates, and the same with season tickets. I think that all might be simplified very much. My two great ideas in laying down this system were these : that it would have the effect of distributing the population over the land very much more evenly than it is now, and consequently we would get not only better social conditions, but a very much better trading condition for our railways. Then, I wanted to enable the large mass of labour that lives in these towns to be able to live ten or more miles out, and to live on an acre or two. I think that would not only have a good effect on the railways, but on social conditions. Then, a system of fixed fares and rates should be laid down, so that anybody might easily ascertain the cost of transit. If there was a desire to use our railways for short-distance traffic for the suburban areas, then, of course, it would be necessary to cut the first stage into half, and probably the second stage also, and make the fares 2d. and 3d. instead of 4d. and 6d. The through fare would be the same, but you would by that means pick up the suburban traffic if you thought it desirable to do so. Personally, I think it is not desirable to do so. I think that we should leave this class of traffic to the trams, omnibuses, cabs, and so on, leaving the railways to deal with the long-distance traffic. The great object that I have in view is to put the use of the railways within the reach of every class of citizen, no matter how poor they may be. If we succeed in doing this, then I say we must have an enormous increase of traffic. Now, I want to call your attention to the basis of rating. The basis of rating on the present system is supposed to be the actual cost of service and the mile. It would be easy to demonstrate that in practice—this is never carried out. It is only a supposition. The charge is by the mile, and the charge is supposed to be regulated by the actual cost of service. As the cost of working a mile in the distant country is more than the cost of working a mile near the towns, the cost is made very heavy to the distant users of the railways, and it places them at a very great disadvantage. We should use our railways to weld town and country together, and to make our distant lands available. We want to place them within the reach of everybody. I do not think it is necessary that I should detain you gentlemen by reading what was said on the question of differential rating, which is contained in Parliamentary Paper L—9, 1886. There is question 17, which is as follows :—

Mr. Hatch : I would ask if Mr. Vaile has thought of the question of port rates—whether he would be inclined to modify his ideas with respect to making them all uniform, irrespective of distance?—In considering this question, and having to deal principally with the public, I always felt the necessity of confining myself to a few points, and of keeping these points persistently before the public. There are many matters of detail that I have never gone into for fear of creating confusion. It is a large subject, and one of some difficulty. I have never had time to deal with the matter of port charges. It is a question which requires very careful consideration.

Mr. Hatch : In ten cases out of twelve, there is water carriage alongside the railway ; therefore port charges are very different from inland rates. I should think differential rates would be absolutely necessary.

Hon. Mr. Richardson : Mr. Vaile has given a most distinct answer to that question—that he would not consider competition anywhere. I do not think he had modified that at all.

Mr. Vaile: Before I give an opinion about port charges, I should like to have some more information than I have at present. I do not know how these port charges are made up—whether part of them goes to the harbours or not. Before giving an opinion I should like to know that. But, speaking generally, I should say, make the port charges as much as possible a uniform rate all over. There is another great objection, I think, as to differential rating. Certain lines do not pay so good a rate of interest as others, and therefore a differential rate is put on what we may call a “poor” line in order to bring up the rate of interest on that line. Now, it is clear, if that is persisted in, it must have the effect of always keeping that district poor, and making it poorer still. I think that is a terrible disadvantage to the colony generally. Take, for instance, the Pictou line. It only paid, I think, 3s. 9d. per cent. The differential rating against that line is very heavy, and if you increase it the effect will be to make the district so poor that it can never rise. I cannot see the wise policy in imposing these differential rates. The Napier line last year earned £4 0s. 3d. per cent., and the Hurunui-Bluff line, £3 18s. 1d., a difference in favour of Napier of 7s. 4d. Here is the rating of the two lines: Goods, Class D, for fifty miles—Napier line, £1 2s. 11d.; Hurunui-Bluff, 17s. 5d.; or a differential rating against Napier, which pays better interest, of 5s. 6d. per ton. I cannot see that such a thing as that is either wise or just. Then, again, in Class E, Auckland and Napier are charged for a fifty-mile distance, 10s. 10d., and Hurunui-Bluff, 8s. 8d.—a differential rating in favour of the southern lines of 2s. 2d. There is an exception made in Auckland in favour of agricultural produce when sent direct by rail to either Auckland or Onehunga; but for any other distance it pays a higher rate. Then, on Goods, Class P, Napier pays 9s. 10d., and Hurunui-Bluff, 7s. 8d.; or 2s. 2d. against Napier. Things of that sort are eminently unjust on national railways. If persisted in, it must have the effect of seriously crippling the agricultural interests of the North Island, if it does not absolutely ruin it.

And then there are questions 629 to 697, which are as follows:—

Mr. Vaile (to Mr. Maxwell): As to differential rating, which is one of the most important questions before us, there was nothing particularly new in your definition of the term, and I have heard it all before, but I do not think you told us all its meaning. I think I shall bring absolute proof to show that it is a system of plundering your customer when, where, and how you can. I believe you approve of differential rating?—I do.

And you advocate its still further extension on our railways?—Whenever it is necessary to encourage, develop, or get traffic or revenue, there it ought to be in operation.

Is not one of your objects in differential rating to put the rates in such a condition as the public will not be able to read them?—No; certainly not—decidedly not.

I should like to read an extract from Mr. Maxwell's report for 1884. He says: “The system of rating differentially in this colony is not carried far enough, and the difficulty that stands in the way is the impatience of the public in submitting to different treatment in different cases, and the reluctance to place in the hands of the railway officers the power which would be necessary for carrying out the principle extensively. While retaining publicity by gazetted rates each rate, were such a principle more widely introduced the public would not be able to do what it now, to some extent, essays to do—read and interpret the rates generally; but the practice followed elsewhere would be necessary: the customer would appeal to the station each time he required a rate quoted; and whether the railways were managed by a Minister or a Board, more power and freedom in respect to rating would have to be placed in the officers' hands. The sensitiveness of the public is then the chief difficulty; but this is not allowed to intervene in cases where many millions of revenue are concerned, and can be, no doubt, overcome here by patience and time, provided the colony recognises that the principle is a desirable one, and gives the proper power to administer it. Maximum rates might be fixed by law, and a suitable court of appeal constituted to prevent abuse of the powers given.” These words are pretty clear and distinct—“that the public would not be able to do what it now essays to do.” Why should the public not read and interpret the rates?—I said that they should be gazetted, to give them publicity; but if you get a very large number of these local rates they will become voluminous, and would not be so readily read; so that it would be necessary for the public, as a rule, to go to the station to get the proper rate quoted.

And you think it would be an advantage to the public?—It would be no disadvantage; they go now to get rates quoted: every merchant does so, and it is also the practice with merchants in England, where there is differential rating, to go to the station to get their rates quoted.

On what principle do you justify differential rating on New Zealand railways?—I think I have said already that it is to encourage local industries, to meet competition, and to give facilities where they would be of advantage to the country and railway. These principles are wide enough. I will give you a case in point—Newcastle coal is largely imported into Dunedin, the Government has made a local rate in favour of brown coal, a native industry, so that the Kaitangata coal may meet the competition of the Newcastle coal in the Dunedin market.

I think you have told us that its object was to secure equality in the treatment of the public?—No, I did not tell you that.

I will read from your own writing: “Following on the inquiry of the English Committee, the President of the Board of Trade has brought down a Bill to deal with the railway traffic in which the principles of differential rating are preserved, and equality of treatment, according to Cardwell's Act of 1854, is maintained. This equality of treatment is considered generally to be obtainable only under the same conditions—that is to say, with like quantities and classes of goods from and to the same stations, all persons are insured like treatment under like conditions. A scheme which ignores the cost of the service would not give equality of treatment.” I ask you if differential rating in New Zealand does insure equality of treatment?—Differential rating and equality of treatment are two different things. You get equality of treatment if you have like rates under like conditions: that is the equality of treatment.

How do you mean equality of treatment?—Equality of treatment is only obtainable under precisely similar conditions—that is, like quantities of the same class of goods from and to the same points and in the same direction, and also a like cost of service.

Will you be good enough to explain the meaning of a ton-mile?—A ton-mile is usually held to mean one ton carried one mile.

And the cost of doing that—when you talk about ton-mileage—would mean the cost of hauling a ton a mile?—Yes, that is so.

If you will turn to your report for 1885 you will find this statement: that on the Auckland lines the cost of hauling a ton a mile is, in pence, 2·43. Does that include any charge for interest?—No; it includes working-expenses, such as maintenance of buildings, labour, loading, and unloading, &c. Interest is never counted as part of the working-expenses.

A ton-mile means, then, the cost of moving a ton a mile, including its proportionate charge for buildings, maintenance of permanent-way—in fact, everything except interest?—Yes.

Then, the cost of moving a ton a mile in Auckland during the year 1885 was 2·43d.?—Yes, that is so.

And for moving a ton in Napier it was 2·13d., and on the Hurunui-Bluff line it was 2·47d.?—Yes.

For the year we have just now got the report for, on the Auckland line it was 2·24d., on the Napier line it was 2·15d., and on the Hurunui-Bluff line it was 2·48d.?—Yes.

What is the meaning of a train-mile?—It means a train moved a mile.

Including the same charges as the ton-mile, but no interest?—Just so.

Then the cost of hauling a train is the cost of hauling one mile without interest?—Everything is included except interest. The cost is not for haulage only, but for all working-expenses.

On return No. 4 you give the train-mileage and the cost in pence: the train-mile last year in Auckland cost 51·01d., in Napier it was 46·92d., and on the Hurunui-Bluff line it was 59·45d.?—Yes.

For the year just concluded it was in Auckland 48·34d., in Napier it was 45·15d., and on the Hurunui-Bluff line 56·71d.?—Yes.

Then we have this fact established, both by the ton-mile and the train-mile, that the cheapest railway we have working is the Napier line, next comes the Auckland line, and then the Hurunui-Bluff. I cannot see where is the

equality of treatment under the differential system?—You have gone entirely away from the answer I gave you just now.

From these figures have we not established the fact that it is cheaper to work the Napier line than any line in the colony, that next comes the Auckland line, and the Hurunui-Bluff line comes third?—Possibly you are right.

Am I not absolutely correct?—I will assume that you are right; I think you are. I will take a note of it and compare the figures.

Now, under these circumstances, are you justified in charging the Auckland or Napier man £1 5s. for the same service as is rendered on the Hurunui-Bluff line for £1?—I think you will find that the Hurunui-Bluff revenue bears a larger proportion to working-expenses than is the case in Auckland: that really the Hurunui-Bluff customers pay higher rates on the average than the Auckland people do.

Is it any wonder, when the rating is so against Auckland and Napier?—The rating is not against Auckland.

I assert that it is.—My opinion is that it is in favour of Auckland.

Is there not on all Class E a rate and a quarter charged, except direct to the port?—Yes, that is so; and when southern grain is carried up to the Waikato a rate and a quarter is charged.

And when Auckland grain is carried to Newmarket a rate and a quarter is charged?—Yes, but very little goes to Newmarket; it is inconvenient to deliver it there.

Is it not a fact that in Auckland and Napier all goods of Class D are charged as Class C?—No, it is not the case in Auckland; in Napier it is.

Has there been any tariff issued since the 15th March?—It has never been the case, as you state, that all goods of Class D were carried as Class C. If you refer to page 332 of the *Gazette* you will see that the rates have prevailed for many years. There is a separate charge for Class D.

There is a special rate for all goods beyond Ohinewai carried up to Cambridge and Te Awamutu, and on the rest of the line goods of Class D are charged as Class C?—Not on all the rest of the line, I think.

Then there are different rates charged on the Auckland-Onehunga line and throughout the Napier line it is the same; goods of Class E are charged a rate and a quarter: is that not so?—Yes, that is so. There is no produce exported from Napier. It is all an import and retail traffic.

Then we have this fact, that although the Napier line is the most cheaply worked in the colony it is very heavily over-rated. For carrying a ton of goods fifty miles on the Hurunui-Bluff line the charge is 17s. 5d.; in Auckland or Napier it is £1 2s. 11d. For carrying a ton of goods 100 miles on the Hurunui-Bluff it would be £1 6s. 6d., in Auckland or Napier £1 13s. 7d.—that is, for goods of Class D. For goods of Class E for the fifty-mile distance it would be: Hurunui-Bluff, 8s. 8d.; throughout the whole of the Napier line, and on the greater part of the Auckland line, the charge would be 25 per cent. more. For 100 miles on the Hurunui-Bluff it is 12s. 10d., and 25 per cent. more than on the other lines. I think differential rating in New Zealand does not insure equality of treatment to the public?—I never said that differential rating insured equality of treatment.

I think you have?—I never said anything about securing equality of treatment. You are confusing two things totally different.

Do I understand you, then, to say that it does not insure equality in the treatment of the public?—You can get equality of treatment under differential rating just as under any other system.

Then, you mean to say that it is equality of treatment?—I do not say so; but you can get it under like conditions.

We are not getting equality of treatment under like conditions?—Yes, you are; every man can get equality of treatment under like conditions.

What are the differences in the conditions between the Auckland and Napier and the Hurunui-Bluff lines that they should be rated so differently?—They vary so largely that I can hardly state the conditions fully now; they are widely different.

Is it not a fact that the Napier lines pay the best of any lines in the colony?—Yes, the highest rates of interest except the Brunner-coal line.

Then, if they pay the best you cannot justify the ground you take up. You said that the Auckland line did not pay as well as the Hurunui-Bluff line, and that was your justification for the treatment they received?—I did not allude to interest; I think I said the percentage of revenue to expenditure was higher on the Hurunui-Bluff than on the Auckland line.

The revenue cannot be greater in proportion to the expenditure when it costs you 59·75 per train-mile?—Yes, it can. This is the proportion of expenses to revenue: Hurunui-Bluff, 63·84 per cent.; Auckland, 68·48 per cent.

There is one thing quite certain—that the Hurunui-Bluff does not pay as good a rate of interest on the cost of construction as the Napier line?—No, it does not.

It has been repeatedly stated that the justification of differential rating was the cost of the service to the country?—I do not think it has been stated so.

I should like to know how you justify charging thirty-five miles at Christchurch as fifteen miles, while all the rest of the colony pays for the full distance?—You ask why we make a lower rate from Southbridge: there is a large amount of competition on the road by carts.

Then, I want to know how you justify charging 8s. a ton for carrying goods, Classes A, B, C, and D, twenty-one miles from Christchurch to Rangiora, including collection and delivery in Rangiora and in Christchurch, and for the same service in Auckland or Napier you charge for Class A, 14s.; B, 12s. 6d.; C, 11s.; D, 11s.; without collection or delivery at either end?—It is a different rate made to meet road competition. What justifies it is that Kaiapoi and Rangiora are situated on one side of Christchurch, and the Christchurch Railway-station on the other. You have to pass round Christchurch to get to these places by rail, and there is cartage going on direct between Christchurch and these places; therefore it is necessary, if the railway is to be of any use at all to these places, to make these low rates.

Hon. Mr. Richardson: I should like to be allowed to put one question in reference to this matter: Mr. Vaile has stated that this has been done because I happen to represent that district. I want to ask Mr. Maxwell whether it was not the fact that this lower rate was put on at the distinct pressure of the local bodies that had these roads to keep in repair? And, having answered that question, whether it is not a fact that we are still being pressed to further reduce the rates because they do not affect the carrying-traffic on that road?—It is a fact that that demand has been made by the people who have to keep the roads, and by the public who want goods carried. The rate has been in force for years, long before Mr. Richardson represented that district, and was made under another Minister. The local rates were first made when Mr. Oliver was Minister for Public Works. Lately, the people of Rangiora and Kaiapoi have pressed to have them still further lowered, because they say that the carriers are to some extent taking the traffic.

Mr. Whyte: Is that mainly owing to the fact that the road is shorter?—Yes, mainly; and, of course, to the taking-up and putting-down business on the road.

It, in many respects, resembles the traffic between Auckland and Onehunga?—Yes; the carriers take orders from the people at their houses, go direct into town, and take the goods back. It is very difficult to compete with them.

If you did not compete probably the trains would run empty?—Yes; no doubt, if we left the old rates on we should get no traffic.

Mr. Vaile: Then, the scale for the small line from Christchurch to Southbridge, in many respects, is less than half the average general scale?—The local rate is made for the same purpose—to utilise the railway. Cartage competition comes in there again.

I think, when I was asking you what was the justification for imposing differential rates against Auckland and Napier, you said it was because the proportions of revenue to expenditure on the Hurunui-Bluff line was better than it was on these lines?—No; I do not think I said that. I think I said I would reserve my answer to that question.

I merely pointed out one case in which the proportion of revenue to expenditure was better—Hurunui-Bluff better than Auckland. I did not mean to say that was the reason for imposing differential rates.

I ask you now, seeing that the Napier line pays a higher rate of interest—seeing that the cost per ton-mile is less, and seeing that the cost per train-mile is less, and seeing that the proportion of revenue to expenditure is better—on what principle do you justify the high differential rate which you impose on that district?—Are you not taking it for granted that the rates which are collected on the Napier line are higher per ton than the rates collected on the Hurunui-Bluff line?

I am taking this fact: that you charge a rate and a quarter on Class E, and you charge Class D as Class C, and that you also impose a higher rate on the other classes?—I do not think it requires any justification. The simple reason for charging rates and fares is to get revenue. There is no other reason that I know of.

Then I am justified in what I say that the differential-rating system is simply a means for taking money, when, where, and how you can get it?—I do not think I can assent to that question. The differential-rating system, as I have explained, is introduced for the purpose of getting traffic and meeting competition.

I must press my question, and ask you for a direct answer to this: what is the object of that differential-rating as imposed against Napier?—How do you know that there is a differential rate imposed against Napier?

The Chairman: Is there any difference in the rates charged in Napier as against the other lines in the North Island?—Some rates are different from the Hurunui-Bluff rates, but when you come to the question whether the absolute charges per ton on all goods carried were higher, I should not say they are not; and that probably they are higher all round on the Hurunui-Bluff than on the Napier Section.

Napier is not specially singled out?—No, it is not. There are specially high rates on all the branches of the Hurunui-Bluff Section.

Mr. Vaile: All goods of Class D are charged as Class C on the Napier line—that means that the charge for that class in Napier for a fifty-mile distance is £1 2s. 11d., and on the Hurunui-Bluff line it is 17s. 5d. Then, on Class E goods are charged a rate and a quarter in Napier as against a single rate on the Hurunui-Bluff Section.

Hon. Mr. Richardson: What part of the Hurunui-Bluff?—I think on the whole of the section only a single rate is charged. I am not aware of any extra charge.

Mr. Vaile: These are the general rates; there may be special rates on the short lines; if so, they will tell very greatly in favour of the Hurunui-Bluff Section. What I want is Mr. Maxwell to tell me on what principle are these extra rates justified?—On the same principle that they are justified elsewhere—to get revenue.

Simply to get revenue?—Yes. There is no other reason for charging rates and fares. I will explain why it is that the profits are higher on this line. It is not, I think, because we get more from the goods-traffic, but the passenger-traffic in Napier is better than it is on the Hurunui-Bluff Section; there is a considerable through traffic, many persons going North from Wellington go overland to join the steamer at Napier and come back the same way, and it is the passenger-traffic which, in my opinion, gives such good results on the Napier line. That is one reason why the better rate of interest is paid. Another reason is that the line cost less per mile to construct.

Mr. Macandrew: I understood that interest was not included?—Mr. Vaile mentioned the interest just now in asking the question.

When the line is opened through to Palmerston, what will be the effect?—It will be one section then from New Plymouth to Napier; that would reduce the average profits as far as we can judge.

Mr. Whyte: The answer you gave as to equality of treatment of the public applies to both systems?—Mr. Vaile claims that he secures equality of treatment all over New Zealand by his system; the advocates of differential rating have never claimed such a thing as that, they know that, practically, equality of treatment can only be obtained under precisely similar conditions. There are no two lines alike. As I have pointed out, fifty miles over the Rimutaka is very different from fifty miles on the Canterbury Plains; although they are both in the country, they are under very different conditions. But railway managers all over the world have never claimed that they can give equality of treatment unless the conditions are precisely similar—that is, the same quantity of the same class of goods from and to the same points. It is Mr. Vaile who claims to give equality of treatment, and I maintain that he cannot do so by dividing his line into fifty-mile sections, as a fifty-mile section in one part of the country is not the same as in another.

Do you admit that, while the cost of working the Napier line is less than other lines, the charge for goods is more on the average?—I do not think that the average charge is more. In some cases it is more, but in some cases there are higher charges on the Hurunui-Bluff Section also.

Mr. Whyte (to Mr. Vaile): Assuming that the average is more, what bearing would that have on your view of the case?—I am speaking at a very great disadvantage in not having all my books with me—in fact, I was summoned here at very short notice—and I have not my English works on differential rating here, or I would be able to prove my position very much better; but, speaking from memory, what I say is that the plea for differential rating, I understand, is that it secures equality of treatment to all people under like circumstances. Now, I want to show by this comparison between the Napier and Hurunui-Bluff Sections that it does not do so, and I am quite certain that I shall be able to take all the figures and prove my position.

Mr. Maxwell: It has never been claimed that differential rating secures equality of treatment under all circumstances, but that it allows it under like conditions.

Mr. Vaile: You stated, Mr. Maxwell, just now that the returns on the Napier line were brought up by the passengers. In the ton-mileage, is the weight of passengers reckoned?—Yes, it is.

How many do you calculate to a ton?—I could not answer that without reference, but the calculation is based upon the average weight hauled. We do not count the number of passengers alone; we have to take the quantity of goods carried, and the dead-weight hauled with it, and the quantity of passengers carried and the dead-weight hauled with them, to arrive at an average.

As I pointed out at the previous sitting, the present system simply means setting up a system of toll-bars, which we want to get rid of. You see the way this works against the country settler. Supposing he has a ton of potatoes to move 130 miles, there might not be more than 10s. profit on them; and supposing he has to pay 1d. per mile, more than all his profit is gone before he can get them to market. That is why there is not a much larger proportion of goods-traffic along the lines. Now, in laying down this new basis of rating, I base the rate on the average cost of service and the density of the population through which the service runs; and the way I propose to do that is to make the stages longer where the thin population obtains, no stage to be more than fifty miles. The Hungarians and Russians gave an unlimited run after you passed a certain stage, and in Hungary they had to alter that. I think fifty miles is quite long enough for any stage. As we introduce these stages, and as the population closes up, they pay more in accordance with the density of that population. The bigger the population through which the service runs the greater the charge per mile; and the thinner the population the smaller charge per mile. Every portion of the population is largely relieved by this system—the people near the towns as well as the people far from them. Coming, then, to the question of finance, as to how it will work out in connection with this system. Assuming my calculations to be right, it would work out thus: I should tell you that my original finance was based on the railway returns of the year 1882, when, as near as I could ascertain, the average passenger-fare paid by all travellers on the New Zealand lines was 1s. 11½d. At that time the accounts were not kept as they are now, and the whole of coaching was lumped and charged under

the heading of "passengers," and that worked out 2s. 6½d. But I found out afterwards the ordinary passenger-fare averaged 1s. 11½d. Since then things have altered a good deal. The charge for the year ending 31st March, 1900, was 1s. 9d., and on the Auckland Section 1s. 7½d. That was the average charge, and during the last eighteen years the lowest average charge has been 1s. 8½d., and the highest 2s. So, you see, last year's average would be a pretty safe one to work on. In 1882 the average distance travelled by passengers in New Zealand was thirteen miles, and it has not increased since then for some reason. The last time I worked it out it was a little under thirteen miles. It is obvious that, whether the charge is by the mile or by the stage, the longer distances people or goods travel the greater must be the charge. It is also obvious that as goods follow men, the longer distances men travel the longer the distance for goods also. Now, I calculate that, with these enormous reductions in fares—when you could go to Rotorua for 3s. 6d. first class, or 2s. 4d. second class; to Te Aroha for 3s. first class, or 2s. second class; from New Plymouth to Wellington for 9s. 6d. first, 6s. 4d. second; Napier to Wellington, 8s. 6d. first, 5s. 8d. second; or Culverden to the Bluff, 18s. 6d. first, 12s. 8d. second—there would certainly be a great deal of development in the travelling, and my own impression is that the average distance travelled under this system will be very little short of fifty miles instead of thirty. The effect in Hungary was to raise the average distance travelled from 71 kilometres, which equals nearly forty-four miles, to 130 kilometres equalling eighty-one miles, or, say, an increase of 83 per cent. Now, if we did the same here, we should get a very remarkable financial result. You will remember I claimed to have made the average fare 1s. I only calculated on an extension of from thirteen to fifteen miles, and claimed that that would give me an average of 1s. That was disputed, but Mr. Fife's table proves I was right. If you work out that figure (the total amount paid), which does not involve any additional travelling whatever, you will find it comes to 11½d., so that it was quite clear the average of 1s. was secured on that calculation. Of course, I had no actual experience of any kind, or in any part of the world to guide me; and although I thought the average would be very much more, I only calculated on the two miles in order to make quite safe. I think there is no doubt that we should secure a much better result than they do in Hungary, for the simple reason that the Hungarians are notoriously the worst travellers in Europe. Prior to the introduction of the zone system they only shifted their population once in three years, and the last time I worked it out they only shifted them once in that particular year. We shift ours from six to seven times in the year, showing that our people have a much greater desire or necessity for travelling, and therefore we should get a much better financial result from the system itself. I have always contended that this is a far better financial system than the Hungarian or Russian adaptation of it. In Hungary or Russia, if the passenger wanted to go the distance, say, from Auckland to Rotorua, he would have to take his ticket at the station for the whole distance through; consequently, it does not afford the same facilities for travelling as this system does. Under the present system it does not matter how many changes you get, the through fare is the only fare that can be earned by any one seat in a carriage, because the charge is by the mile, no matter where you start from. Supposing we only got an extension to twenty-five miles, that twenty-five miles, I calculate, would give us an average fare of 1s. 8d. It would land you, going from Auckland, into the Pukekohe stage, which pays 1s. 8d. average, and I feel certain that we should get that extension, and I believe that we would get a great deal more. If so, we would get a very much larger profit. Now, assuming that we got only a half the extension they get in Hungary in the distance travelled, and the same multiplication of passengers—they managed to get four where they used to get one—assuming we get four, taking the whole of our lines, it would work out thus, assuming the average fare to be 1s. 8d., and that we get four times the number of passengers: The ordinary passenger revenue only would reach £1,899,172, instead of £474,793, which we actually received for the year ending the 31st March, 1900. Now, those figures seem so outrageous and so startling that I do not wonder they are received with incredulity, but it does not seem to me the least bit impossible. The whole thing depends on the average distance the people will travel. I do not think anybody can doubt that there will be probably a dozen people who will go to Rotorua for one that goes now—that is, under my system. For my own part, I have never seen Rotorua, and for the simple reason that the transit charge for the time I could spend there has debarred me from going, and there must be tens of thousands of people in a worse position than I am. If we assume, for the purpose of being absolutely safe, that our average fare would only be 1s. 3d.—you see that for thirteen miles it is 1s., that is the department's statement. Now, under the facilities offered here, I think it would be perfectly unreasonable to expect that extension to be less than to 25 per cent. That would give us 1s. 3d. at the least, and probably 1s. 8d. I think that is absolutely safe, and if that is so the finance would work out thus: The number of ordinary fares taken during the year 1900 were 5,468,284. Now, these at 1s. 3d. would have realised £341,767, and four times this would mean £1,367,068, or £892,275 more for ordinary passenger-fares than we received that year.

1. *The Chairman.*] Is that on the Auckland section?—No, Sir, on the whole of the sections. Now, that is the lowest result I should expect, and I feel perfectly certain that we can get that result. I may mention, in passing, that as regards my figures, whether quoted as regards this country or other countries, they have always been verified by results. It is always necessary to bear in mind that the whole thing depends on the average fare, and that the average fare depends on the average distance travelled. Now, I believe that it will be nearer fifty than twenty-five miles, and, if so, the figures I have given you will be enormously exceeded. We should also remember this: the present average trip is thirteen miles, but every trip taken from Auckland to Rotorua is equal to thirteen of the ordinary trips, and every trip taken from New Plymouth to Wellington would be equal to nineteen of the ordinary trips, and every trip from Napier to Wellington would be equal to sixteen trips, and every trip from Christchurch to Dunedin would be equal to seventeen and three-quarter trips, and every trip

from Dunedin to Invercargill would be equal to ten and three-quarter trips. Now, I do not think any one can doubt that, under the reduced fares, named, the travelling between these points must be enormously extended, and, if so, you will see from these figures I am giving you how much the average distance travelled must be increased. The first pamphlet I issued on this subject was in February, 1886, and in that I made this statement, and put it in italics in order to emphasize my then opinion, and to have it on record. It was written fifteen years ago. I said: "This,"—the alteration in the system—"with the enormous expansion of general traffic that must follow, would give us at least another £1,000,000 per annum of net railway revenue. It would not surprise me in the least to see this result obtained in less than two years." That was my opinion fifteen or more years ago, and it is mine now. I was careful to put it in print, but, after having put it in print, from that time until the last year or two I never claimed more than £200,000 per annum. I believed it then, and believe it fully now, that it is an easy matter to take another £1,000,000 per annum out of the railways, and I need hardly say if we could it would be an enormous benefit to the country. There would be no need of further borrowing, and we could go on expanding our railways out of revenue. Of course, this is one reason why I have always asked that I might be personally connected with the trial, as a very great deal of the success of a system like this must depend on the way the trial is carried out. I do not wish to imply that the department would do anything wrong, but the inventor is the only man in the world who has got an idea of the thing he is working at until he has brought it to a certain stage, and I am the only individual that has got all the details of this system, and I could not very well put it on paper; therefore I should know how to meet any little difficulties that might crop up. You, gentlemen, will remember that I have never asked for any permanent position or post, but simply to have the guidance and direction of the trial of this system in order to guard against mistakes. I hold it is a perfectly ridiculous thing to believe that a monopoly of the inland carrying-trade of a country can only be made to pay 3 per cent. I think Sir Joseph Ward will bear me out in this that there is something wrong in a system that will only give that result. Here is a monopoly, and only with the greatest difficulty 3 per cent. can be extracted out of it. Take the railways all round, that is the average rate they are supposed to pay. Now, it has been asked before, and probably will be asked again, how is it that under the stage system you can make so much more than under the mileage system? It is for this reason: As I said before, the through fare is all that any one seat in a railway carriage can earn under the mileage system. But under this system of mine there are perhaps five stations on a seven mile stage, and you could earn the through fare five times over; while the through fare is only 4d., you can make a seat in a carriage worth 1s. 8d. It is by that process, of course, that the penny omnibuses in London, the penny tramcars in Sydney and in other places, make their money. If they could only get their through fare they would go into liquidation and the bankruptcy Courts immediately. Here is a long stage of eighty-five miles from Pukekohe to Frankton, and the through fare would be only 4d. or 6d. But here are sixteen stopping-stations between the two towns, and you can earn the through fare sixteen times over under my system. By the charging from one stage to the other it is always piling up the profit, and that is the real reason why the stage system makes so much more money than the other system. The fact of the average fare now being only 1s. 8d. will show you how very few through fares there are at the present time for any of the longer distances. If there were many travellers through on any of the long lines, why, then, of course, the average fare must be greatly more than 1s. 8d. You take from Auckland through to Frankton Junction: There are thirty-one stopping stations, so that under my system you could get, where your through second-class fare is now 7s. 1d., 10s. 4d., if you keep the carriages employed. And then, what is true of Auckland is also true to a far larger extent of the Hurunui-Bluff Section. Now, as I have asked to have this system tried first on the Auckland Section, it is as well to deal with the finance as it will come out there. The reason why I ask for it to be tried on the Auckland Section is that that line will put the system to the severest test that can be applied to it anywhere. The reason of that is, that on the Auckland Section there is a town called the Thames, of four thousand inhabitants, and then the only other town containing as many as 1,250 inhabitants is Hamilton. Those are the only two towns mentioned in the census of any importance on that line. Now, you will see on the Hurunui-Bluff Section or the Wellington-Napier-Hawke's Bay Section there are many towns of over two thousand inhabitants, and consequently these large sections mean giving a much larger trade, and consequently a better financial result. The 1900 returns show that the number of fares taken on the Auckland section was 745,982. That produced a revenue of £60,816, giving an average fare of 1s. 7½d. Taking my lowest calculation of 1s. 3d. per fare, that would give £46,626, and four times that would give £186,504, or a gain on this line alone of £125,688. Now, if you make the very ridiculous assumption that we should only gain two fares for one carried now, we should still make a profit of £32,436 from ordinary passenger-fares only—that is, assuming the average fare to be only 1s. 3d. Now, I say it is impossible that so small a result could be obtained; but, even if it were so, we would still profit to the extent of £32,500, in round figures. Then, again, the question was asked me the other day, supposing the thing were an utter failure and you neither got an increase in the average distance travelled nor in the number of passengers carried, what would be the loss? The loss would be £23,517. Now, gentlemen, it is a question of staking £23,517 against a possible £1,500,000, and I ask if it is not worth the trial? I do not think that the figures I have given you are in the least degree extravagant. They may appear extraordinary, but when you come to examine them I think you will find the basis is sound. At any rate, my calculation has been borne out in every country where the system, even in a spoilt form, has been tried.

2. *Mr. Napier.*] Would you state whether those figures that you have worked out are calculated on the same basis as on the results achieved in Hungary?—They are calculated this way: on the supposition that we get an increase of four times the number of fares; the same as they have done in Hungary.

3. You do not make that clear as to the result in Hungary?—If on this Auckland Section of railways you get an extension of the average distance travelled to twenty-five miles only that would give you an average fare of 1s. 3d., at the least; then, if you got four fares to the one you get now, you would get the increased revenue named—£186,504.

4. Did they get the four fares in Hungary?—Yes.

5. Then you calculate on the experience of Hungary?—I was giving you two or three calculations. Assuming we get similar results under the system to those obtained in Hungary—I do not mean as regards the distance travelled, but as regards simply the number carried—assuming our distance is very much less than that travelled in Hungary, not one-third, you would still get from the Auckland lines £186,504 from ordinary passengers alone, and that would mean a gain from this one section of £125,688. Then, making the absurd assumption that we should only gain two fares for one carried now, we should still make a profit of £32,436 from ordinary passenger fares only. The question arises, if the whole experiment was an utter failure and there was no increase either in the distance travelled or the number carried, what would the loss be? Assuming Mr. Fife's figures to be correct, it would be £23,517. Of course, the assumption that the vast reductions made would lead to no increase in travelling is ridiculous past belief; but looking at it in the worst possible light the greatest loss that could occur would be £23,000; while possibly the gain would be £1,500,000 from the whole of our lines. There is another very important item that has to be borne in mind in connection with this system, and that is the enormous saving it would make in the working-expenses. I remember that an article appeared in the newspapers, written by a railway man, some years ago. He made out that the adoption of this system would save an enormous sum of money. I may point out this: I have always calculated and asserted that we could do three times the work on our railways that we do now, and not increase the expenditure to any appreciable effect, because in working the railways on this system we can get such a very much larger profit on the work done on the distant portions of the lines. There certainly would be, in managing a traffic like that, an increase in the number of porters and men you would require, but there would be an enormous decrease, on the other hand, in the office and departmental work, the more expensive portion of the labour employed. For instance, in keeping the accounts, in printing and issuing the tickets, and in printing the passenger time-tables, goods traffic, &c., altogether the saving would be something enormous. I remember in 1894—I took a note of it at the time—the gentleman I referred to as publishing an article on this system said: "If the present system of issuing tickets had been fully carried out, it would have necessitated the printing of forty-seven thousand different kinds of tickets, but as a matter of fact he believed six thousand were made to do duty for the whole." Under this stage system you would only require four varieties of tickets, and these would serve for the whole of the lines. All that we require is a first-class and a second-class ticket for any of these stages under my system. Supposing a man were living in a district immediately preceding a stage station, and he wanted to pass to the district next beyond the stage station, it would be somewhat unfair to charge him a double journey for such a short distance. It would be an objection raised to the scheme, and I therefore propose for these stations to issue a ticket of another colour, which would enable the man living within a stage immediately preceding a stage station to pass into the stage immediately past the stage station, or *vice versa*, for the ordinary fare of 4d. or 6d. Well, that would necessitate a first- and second-class ticket only, and consequently, throughout the whole of New Zealand, you would have but four tickets for conducting your passenger traffic. Now, I say, the saving in the cost of printing and issuing these tickets, and one thing and another, would be something enormous. Of course, the goods tariff and all the rest of it being dealt with in the same fashion, there would be an immense amount of saving in printing and in the working of the railways. As regards parcels and small lots, I propose simply to stamp them the same way as you do in the Post-office—put a stamp on them and away they go. When I last took out the different goods rates chargeable on the Auckland lines, there were no less three hundred thousand, and that return was taken out some years ago. Under the new system there would be only about two thousand. So that there is an enormous simplification there. Then, as regards season tickets and parcels rates, I would deal with those in the same fashion. There is another great convenience I would call your attention to in working on this system, and I often find it out in travelling myself. I take the first-class ticket because I frequently want to change from one class to the other; I meet people I know and want to do business with, and I want to get out of one class into another. In taking a second-class ticket I cannot do that, but I take a first-class ticket in order that I may have the privilege. Under my system, if I pay for a first-class ticket for the first stage in going from Auckland to Frankton, say, and find when I get to the next station that there is a man in a second-class carriage that I want to see, all I would have to do is to go into the second-class carriage and pay 4d.; so I can change from class to class as it may suit my convenience, without being penalised for so doing. Then, another enormous advantage this system would have—and an advantage which I should expect to make a very great deal of money by—would be the way it would enable labour to move up and down the lines. If a man up at any of these out-stations—say, at Morrinsville or at Cambridge—wanted labour, all he has got to do is to wire to a labour agent in Auckland, and the men could afford to go at my prices, but they could not afford to go at the present prices.

Sir J. G. Ward: They go for nothing at the present time.

Mr. Vaile: Under my system you would get labour moving over the lines by hundreds where you get one workman now. I say such a system as that must develop a large internal trade, and it strikes me more and more that we shall have to depend to a greater extent upon our internal trade.

6. *The Chairman.*] What do you mean in referring to "our internal trade"?—Trade that deals strictly with our own country. If we get involved in an European war, what have we got

to rely upon? Our export trade would be gone, and I think we should develop our internal trade. I say, by means of this system, you could introduce a large body of settlers into the King-country and on to the lands on the Midland Railway. If you get the people introduced into these places you make work for your railways, and it is a thing that will have to come. Now, gentlemen, all that I ask in relation to this matter, so far as I am myself concerned, is that I may be associated with it in some way. And what I ask is this: that, if a trial of the system can be arranged, it be applied to ordinary passengers, in the first place, on the Auckland Section of railways, for the reason I have stated, and if it is successful there it must be successful elsewhere. Then, gentlemen, I would suggest very respectfully that what would be the right thing to do is this: If it were tried as regards ordinary passengers in Auckland, and succeeded, then I would apply it to the Invercargill Section of railways, as being the next most difficult line, and apply it similarly as regards ordinary passengers only, and if it is successful on these two sections we would know for a positive certainty that it must be very much more successful on the other sections, and I would then apply it to ordinary passenger fares on these other sections. Having applied it to ordinary passenger fares in that manner, and thus doing equal justice to the whole of the sections throughout the colony, I would then next apply it in the same order to the other items of coaching, and see how that works out, and then I would apply it last of all to the goods traffic; and if we apply it in the order I have mentioned I cannot see that there is any portion of the colony that would have any cause to say that any one district got any advantage over the other. You must begin somewhere, and I think I give a good and sufficient reason why it should be tried on the Auckland section first—on account of its great difficulty, as outside the suburban area it connects with only one town of four thousand inhabitants and one town of 1,246 inhabitants. If successful on this section it must be trebly successful on the other sections. In asking for that I certainly do not ask for it in my own personal interest. Gentlemen, I think it is hardly necessary for me to detain you with any further remarks. I hope a good deal that I have not said on the matter will be elicited from me in the form of questions and answers. I would like to draw your attention to this, however: Perhaps I might be permitted to say a little about my own personal position in the matter. It is nineteen years since I brought this thing prominently before the public, and I look back on those nineteen years with very mixed feelings of one kind and another. Gentlemen, there is one thing that is impressed very strongly on my mind, and that is this: From New Zealand has gone forth this idea. It has been seized hold of by the Hungarians, the Austrians, Bohemians, the Russians, the Danes, the Germans, and sundry other countries. They introduced it on their lines with this result: that they are successfully competing with us in things that they could not have competed with us for—the London and other great markets—but for this New Zealand idea, while so far our own people have been excluded from participating in its benefits.

7. It is the cheap labour?—Cheap labour may have something to do with it, but it has nothing to do with this fact: Last year the Russians sold over two million pounds' worth of Siberian butter in the London market, and expect this year to sell over four million pounds' worth. And they are putting on ships to take over frozen meat and other farm produce to the London market, and I ask could the Russians have placed a pound of butter or a carcass of mutton in London but for the stage system? It may be said we have not the population to do this thing; but bear in mind that the area of Siberia is 5,000,000 square miles, and when they put the stage system in force there there were less than four millions and a half inhabitants. Now that, I think, is a complete reply to the statement that we have not got the population. I say the Russians could never have put their produce on the London market if it had not been for the stage system.

8. And slave labour?—It seems to me to be a humiliating position that we should be beaten in our own markets by our own inventions. It seems to me to be a very hard position that; but, however, there it is. If they have the advantage of us in cheaper labour, the greater the reason why we should secure the advantage of cheap and efficient transit. Well, gentlemen, I will put in these printed papers, showing what has been done in Hungary and Russia.

Hungary.

Year.		Passengers carried.	Receipts in Austrian Florins.
1888.	Last year of the old system	9,056,500	14,112,000
1889.	Seven months of old and five months of new system	13,054,600	15,021,500
1890.	First whole year of new system	21,635,600	16,937,000
1891.	New system	25,781,400	18,591,800
1892.	"	28,623,700	19,684,900
1896.	"	34,806,800	24,293,243
1897.	"	35,245,900	26,951,677

It will be seen that the effect of adopting the stage system, even in this faulty form, has been to quadruple the traffic, and double the revenue. One of the most important results obtained in Hungary is the great extension in the average distance travelled by each passenger, which is from 71 to 130 kilometres, or over 83 per cent.

Russia.

As I understand it, what has been done in Russia is this: On the 1st December, 1894, the Government of that country applied the zone system to their railways for all distances exceeding 200 miles. For all shorter distances from their large centres the old system was retained. The passenger revenue of the Russian lines for the previous year had been £8,061,754, but the Russian railway "experts" calculated that the introduction of the new system would reduce the year's

revenue to £6,167,552; it, however, wound up with £9,183,333, or £1,121,579 more than the previous year, and £3,015,781 more than the railway "experts" calculated on. I may mention that copies of my pamphlets were sent to the British Consul and Ambassador at St. Petersburg some years ago. I hope it will be noticed that all this vast increase of revenue has been produced solely from the most thinly populated districts of the vast Russian Empire. The same results took place in Hungary, where the largest increase also occurred in the most sparsely populated districts. These indisputable facts prove incontestably that I am right in my oft-repeated statement, that the stage system does not require a dense population, but, on the contrary, will give the best results in a thinly populated country. They fully dispose of the not-sufficient-population theory. Well, gentlemen, I have to thank you very much for the patient hearing you have given me. I feel, as I always do when speaking on this subject, that I have not acquitted myself as I should like to have done. It is rather too big a subject for any one man to deal with.

9. *Mr. Napier.*] You have said, Mr Vaile, that the system has been tried in Austria, Russia, and Germany, I think?—Yes.

10. In each of these countries has the result been that not less than four passengers have been carried under the stage system for one under the mile system?—I can give you the figures for the first years in Russia. Since then I have failed to get any information. Here it is on page 39 of my pamphlet on "Social Problems," and on page 22 you will find the figures referring to Hungary.

11. Your answer is that the figures are given on pages 22 and 39 of your work on "Social Problems"?—Yes; that is, so far as Hungary and Russia are concerned.

12. Can you tell what has been the result, as far as the movement of the population in New Zealand is concerned, and what the reductions made in railway-fares in New Zealand during the last fifteen years have been? Speaking roughly, what has been the general result of the reductions in fares? Has it increased the travelling or not?—Oh, yes.

13. To what extent?—To this extent: Speaking from memory, when I commenced we shifted the entire population five times in the year. I find, taking the last return, we shifted the population seven times. It is an increase from five to seven.

14. Within fifteen years that is a successful reduction?—It is much less than fifteen years. It is only within the last four or five years that there have been any real reductions made.

15. Then, you say that within the last five years the reductions that have been made in railway passenger-fares have caused this result: that the population of New Zealand has moved one and a half times instead of one?—It has moved seven instead of five times.

16. That is, equal to 50 per cent. nearly?—Well, nearly.

17. Then, Mr. Fife's figures which you have exhibited show the population moving five times?—Yes.

18. Well, then, you have got the reductions already made causing an increase of nearly 50 per cent., according to Mr. Fife's results: is that so?—Yes.

19. Then, if you succeeded in moving the population ten times instead of five, would you get the same result, as far as the revenue is concerned, that was obtained under the mileage system when Mr. Fife prepared his figures?—Assuming the fare to be the same.

20. Assuming you got no increase in the average distance: if the population were moved ten times instead of five times, would the same revenue be received?—Yes; it would be more, because the population, of course, has increased since then.

21. *Hon. J. G. Ward.*] In connection with this transport of the extra number of passengers that you calculate would be carried by the adoption of this system, have you been able to work out by comparative results what has taken place elsewhere—what the increased expenditure would be to enable the passengers to be carried?—So far as Hungary is concerned, the report for the first four or five years shows scarcely any increase. Some years it did not increase at all.

22. I suppose you know that we have been giving reductions, in passenger-fares particularly, for some time past, and our experience is that it does increase our expenditure very heavily?—I think it would increase your expenditure almost as much as it would do to quadruple your traffic. It is one of those things in which the circumstances of countries vary, and it is one of those things which can only be proved by trial.

23. In your statement you made no allusion to the increased expenditure, which is a very important point?—I think I overlooked that, then. What I meant to say, and should have drawn attention to, is that I consider the decreased cost of working this system would more than compensate for the extra cost of working the trains. I think it would more than compensate for the extra work of running the necessary trains. The increased cost of carrying passengers, I take it, is mainly a matter of train services, is it not, Mr. Ronayne?

Mr. Ronayne: Extra train services would be required, no doubt.

24. *The Chairman.*] Referring to the cost of dealing with tickets, Mr. Vaile, you said this system would save an enormous amount of money in this respect?—Yes.

25. *Hon. J. G. Ward.*] You said more porters would be required, but that there would be a decrease in the clerical department?—Yes; an enormous decrease, and in accounting also.

26. What I want to try and find out from Mr. Vaile is whether he has been able to make a calculation upon the figures he has been placing before us, giving the proportionate increase of expenditure that would be involved by the great change he has suggested?—Until tried, it is only a matter of opinion, and I based my calculation very much on Mr. Hannay's evidence. He said distinctly that on the Hurunui-Bluff Section they only averaged seven passengers in a carriage. Now, you know most of the carriages are capable of carrying forty passengers—

27. We are averaging a great deal more than that under existing conditions?—That was the only real figure I had to work on, and his evidence was very distinct on that point. I can give you what he said on the matter.

Hon. J. G. Ward: I do not wish to ask Mr. Vaile any further questions on behalf of the Railway Department. For this reason: I know fairly well the system Mr. Vaile advocates, and I

understand all right the practical suggestions he has made of his own system—as to how it should be put into operation, and as to how it should be carried out. The only thing that the Government of the colony would require to be satisfied about before we could adopt such a system generally in New Zealand would be where it is going to land us, and that, I take it, could only be judged by our giving it a practical trial under conditions which could be decided on, and until that can be decided upon it is unnecessary to put Mr. Vaile through a category of questions. The system has been explained profusely, and I do not think there is any further information as regards the details that we want. Unless members of the Committee want it, I do not want it. After the evidence is in print, and we have got it, I will then go into the matter with the responsible officers of the railway, and place before the Committee a memorandum dealing with the matter. I understand Mr. Vaile's system fairly well, so by my not questioning you, Mr. Vaile, you will understand there is no discourtesy meant, but that it is unnecessary.

28. *The Chairman.*] First of all, as to the cost of the carriage of this increased traffic compared with Hungary and Russia, Mr. Vaile, have you ever considered the actual cost of carrying each passenger per mile in New Zealand?—No; I could not tell you that—only that they carry them at a less price than I propose. The actual cost of carrying a passenger in England in half-full trains is 1d. for every thirty miles. We can do it quite as cheaply here.

29. Where—In Hungary or in Russia?—In both countries. In Hungary, 457 miles for 3s. 4d.

30. You are aware that the railways here are controlled by the State?—Yes.

31. And that if the railways are not satisfactory the first thing will be that a member will run to the Minister and see that an extra guard or man is put on?—Yes. I say, in regard to the question of State administration and private administration in the world over, that the State administration is the best. They (the railways) are more successfully administered by the State throughout Europe than by the private companies.

32. The Auckland Section at present is 330 miles: that cost the colony £2,500,000?—Yes.

33. Do you know how much the colony is losing at the present time on it?—I say, if you adopt my system you will not lose anything.

34. Do you know what the population of Auckland is?—I suppose it is about 176,000.

35. Now, you reckon that you would get four passengers under your system to the one that the department is now getting?—Yes, I think so.

36. How many times would the whole population of Auckland have to travel to achieve that?—I have not worked it out.

37. Do you think that they would be always travelling, or would they have any time to stop at home?—It would take them a good many more than four times to do that.

38. Do you think that if you carried them for nothing they would travel?—Yes; but I do not think that would be any advantage or inducement to people to travel for nothing. I do not think it would be an inducement, because people who get things for nothing do not value them.

39. How long has this table of Mr. Fife's been worked out?—It was worked out in 1886.

40. That is fifteen years ago?—My comparisons, you must bear in mind, are all drawn with this table.

41. Mr. Napier is under the impression that you have achieved what you told the Government fifteen years ago would be the result: have you taken into consideration the increased population in proportion to the increased mileage of railways opened? Can you tell me how many miles of railway were open fifteen years ago?—I have it in some of the pamphlets I have published. In 1885 the total number of miles open in New Zealand was 1,479.

42. So that during the last fifteen years the total mileage opened has practically doubled?—2,212 miles, if I remember rightly.

43. Now, do you know what the population was fifteen years ago?—No, I could not tell what it was.

44. In the countries you were dealing with, especially in Hungary, the population is practically stationary, and the railway system is practically stationary—the miles of railway opened were practically stationary, and also the population?—I beg your pardon: there was an enormous increase in population, and also in railway mileage.

45. Will you explain to me, Mr. Vaile, if you know the increased mileage opened during the last fifteen years, and the increased population in the last fifteen years?—You will find it is the same, as a rule, in every country. The more you increase the length of the mileage the greater is the proportionate cost of working the railways.

46. Do you know what the Auckland Section is paying at present per cent., and what the net revenue from it is—it is £2 7s. 9d.?—Give me a chance, and I will make it pay three times that.

47. Besides that, we have to pay another £150,000 a year by the way of additions to open new lines, have we not?—That is because it is not worked properly.

48. So the taxpayer of the colony has to pay at least £200,000 a year to keep the Auckland Section going. Do you know what extra rolling-stock would have to be provided?—That is the Traffic Manager's business.

49. Have you considered that phase of the question at all—what extra accommodation would have to be provided to achieve the result you propose?—At the last Committee I was before, Mr. Hannay distinctly said that on the Hurunui-Bluff Section they only carried seven passengers in a carriage; that was the average. I have many times travelled in a 10-ton carriage, and had it all to myself for thirty, forty, or fifty miles. Of course, there would be certain crowded points at which you would have to put more rolling-stock on.

50. *Mr. Lawry.*] Did you say, Mr. Vaile, that this table you referred to of Mr. Fife's was compiled by him in 1885 or 1886?—In 1886.

51. Was that a period of great prosperity in the colony, or of depression?—It was a very dull time.

52. Was it not a period of very great retrenchment throughout the whole colony?—I am sure I do not know. I do not see how that will affect the question.

53. Do you not think it will affect the question in this way: that if the settlers had not money they could not travel?—The only object of this table was to show the finance—what would be the average fare taken. It did not matter for that whether there were few or many taken. I had said the average would be 1s., and Mr. Maxwell said it would be 4½d., and the question was, Who was right? And the table was produced to show that; and it proves that I was right.

54. Did the Committee understand you to say that the result of the reduction in fares had largely increased the travelling?—Yes.

55. Do you not think the period of prosperity we are enjoying has a great deal to do with that?—If you have not got the money you cannot travel—as well as you cannot do many other things without it.

56. Do you want the Committee to understand that the country settler is going to travel if he has not business to make him do so?—I say we are going to make the business for him. But we are not depending upon the country settlers; what we want to do is to get the great mass of people in the large cities to travel.

57. Do not the Government carry them on workmen's tickets for short distances much cheaper than you are going to do? Have you never said on a public platform that you were opposed to season tickets?—No; I have always said that I believed season tickets to be a good institution, and that they ought to be encouraged.

58. Do you know that the trains from Ellerslie to Auckland are crowded to excess every morning?—That may be so.

59. Do you know that they travel cheaper than under your published system?—No. What you are doing is comparing ordinary fares with season-ticket fares. I do not do that.

60. Do you not know there are such things as workmen's weekly and monthly tickets: they are not season tickets, are they?—Yes, they are. Mr. Ronayne will correct me if I am wrong.

Mr. Ronayne: We account for them as season tickets.

61. *Mr. Lawry.*] Do you wish the Committee to understand that if you had an opportunity to carry your system out you would largely settle the King-country?—Yes.

62. Will you tell the Committee how you arrive at that conclusion?—The settlers could bring their produce from there with a profit. They cannot do it now under the present system.

63. Do you know that you can get potatoes, for instance, into Auckland from forty miles up the line cheaper than you can get them from Paparangi?—That is quite likely.

64. Do you not know that it is the low price of produce, and not the price of transit, that prevents produce from paying?—In addition to your low price of produce, if you have to pay a high price of transit, of course you increase the difficulty. The system of railway can actually assist the producers.

65. Do you think that it would be fair to people in the South to give you absolute control of the railways in the North, and that is what we understand you are asking for?—I have never asked for that. I simply asked to be associated with this experiment in any way that may be acceptable to the Minister—in a way that I can have a general supervision over it to point out the errors, if there are errors being made, and to generally assist in the most cordial manner that I possibly can. And the reason why this request was made was owing to the very hostile spirit in which I was met by the gentlemen who then had control of the railways. But these gentlemen are now out of it, and I say there is no reason why I cannot work with the gentlemen who now control our railways in the most cordial spirit. I have never asked for anything but to serve the public to the best of my ability.

66. *Mr. Massey.*] In connection with season tickets, you propose, then, to make a proportionate reduction in connection with your system?—Yes; I would rearrange the season ticket altogether, and I think it might be very much improved and simplified. I had to deal with this railway question, and gentlemen who know anything of it will know that it is about the most abstruse and probably the largest question in the whole world. I believe that it is even greater than the land question—the transit question—for the simple reason that the land without the transit is absolutely valueless; you must have the transit before you can make the land worth anything at all; and therefore I have felt the vast importance, when dealing with the transit question, of dealing with it in a way the public could understand. And I felt that, in order to do this, I must keep the public mind concentrated on the principal idea, and therefore I would not allow myself to be drawn off it by disputations on goods rates, which Mr. Maxwell and Mr. Hannay tried to drag me into. I said, "Let me stick to the principal idea." In dealing with the public it was necessary to keep their minds fixed on the principal idea, and therefore I stuck to this, and this alone, and that is why I would never allow myself to be drawn into the goods traffic or the other items of coaching. The other countries that have adopted my system have applied it first to passengers. The whole idea went from New Zealand to the Continent, and I think it is an awful pity for this country that it did so. If we had taken the lead what an enormous amount of advertisement the colony would have got through it. It was our invention, and we ought to have adopted it. They got it, and we shall now be told that we are adopting the Hungarian system.

67. Would you mind telling us briefly what are the principal points of difference between your system and the Hungarian system?—I have no information as to how the Hungarians deal with goods traffic.

68. I am speaking of passengers?—The great difference between this system and the Hungarian system is this: The Hungarians have two systems of charges. They have what we call "local" but they "near" traffic. However, what they mean is for the first four zones—they call

them half-zones. The charges are for any distance between these zones; but if you wanted to go from, say, Auckland to Frankton, which is eighty-five miles, you would have to take what they would call a distance ticket for that. The tickets are printed in long slips. Here are three local-traffic tickets. Then, they have a longer ticket, and these different zones are marked on it; and say you wanted to get to Frankton, and there are many zones on beyond Frankton, they draw a pencil across that ticket on the name Frankton, and down to the starting-point, and that ticket will only carry you to the point, and you cannot make use of it for any other place. But on my system the travellers are free to travel anywhere, and get in and out as they like, and I am satisfied the more you suit the convenience of the public the better financial result you will be sure to get. What they found in journeys of long distances is this: A man takes a ticket to, say, Frankton; then another man takes a ticket for local traffic, and changes with this man. The two systems overlap each other, and the department has lost very heavily by that. They (the travellers) have got two journeys out of one ticket. They could not do that by my system. I am told the Hungarians have lost very heavily through having these two systems. Those are the features of difference between this system of mine and the Hungarian passenger traffic. But the real difference between the stage system and every other system consists in the fact that it is the only system in the whole world that proposes to levy charges on the various districts in proportion to their ability to bear the strain.

69. What are the fares compared with what you propose?—The fares in some instances would be higher, and for the long distances they are very much lower. For instance, they carry you in Hungary—and have done so for the last ten years—a mile longer than the whole length of the Hurunui-Bluff line, 457 miles, for 3s. 4d. My fare for that would be 12s. 8d.

70. By taking the average per mile?—I have never tried that. They reduced them the same as I proposed. When I first studied this question I came to the conclusion that you could get no real increase of travelling unless you took the charges on an average down to a fifth of the then price. I tried it at a half, I tried it at a quarter, and I came to the conclusion that it would not induce sufficient travelling; and I set myself this task: to make such a reduction as would insure two persons travelling where one travels now, and that the average fare paid would reach 1s. I was then working under the impression that the average fare was 1s. 11½d.; now it is only 1s. 7d.

71. That is the average at present?—Yes; 1s. 7½d. I believe that figure is correct. I only worked it out once.

72. With regard to your average distance, what do you expect it to be?—I would expect the average distance, if we only secured the same increase that they secured in Hungary, to extend from thirteen to twenty-five miles. Now, I would expect my system to extend it to a great deal more than twenty-five miles. But if only twenty-five miles it would take you from, say, Auckland into the Pukekohe stages—that is this stage between Drury and Pukekohe. Well, that would give me an average fare, assuming there were equal numbers of each class, of 1s. 8d.

73. Then, you expect your average distance to be twenty-five miles?—I expect it to be more.

74. What do you say your average fare would be?—If twenty-five miles, the average fare would be 1s. 8d.

75. You say that your average distance is twenty-five miles and your average fare 1s. 8d.: that would be no great reduction compared with the present rate?—You are only thinking of the second-class single fares as applies here.

76. I want to give you the opportunity of explaining it. I am taking your average distance and your average fare?—You know I have always contended—although I did not dare say so—that they (the travellers) could be carried at far lower fares than I proposed. You could make the first-class fare at 4d. and the second-class fare at 2d., and you could do quite well at that price. I was very much in the same position as George Stevenson—I did not dare say what I knew and believed, because I knew it would only excite ridicule, and I had to keep myself to a very moderate statement, and so took the lowest initial fare at that time. The lowest fare charged in 1882 was 4d., and I started with the initial fare. I knew it could be done for less, but did not think it was wise to say so. The second-class fare to Pukekohe is 2s. 8d. now, and under my system it would average 1s. 4d., which is just one-half the money.

77. Coming to the present average fare, it is 1s. 7d., is it not?—Yes.

78. Now, what increase of travellers would you require to make the railways pay equal to what they pay at present under your system?—About three-quarters of a passenger more than they get now.

79. You would not require it to be doubled?—If they doubled them on the Auckland Section they would get a profit of over £32,000.

80. You told us about the increase of passengers in Siberia: would you mind telling us where you got your figures from?—If my memory serves me right, I got them from the *Engineer*.

81. *Mr. J. W. Thomson.*] All your references have been to the Auckland Section of railways. Might I ask you a question or two as to what the fares would be on lines I am connected with myself—for instance, there is the Green Island line, near Dunedin, which is five miles in length: what, according to your theory, would be the fare on that stage?—I expect for five miles it would probably be 4d. or 6d.—that is, assuming you retained the first stages as they are now. It is possible that if you wanted to use the railways for this short-distance traffic you would have to charge by half-stages for the first seven or fourteen miles.

82. There is a good deal of passenger traffic on this section?—From Dunedin to Green Island, if we did not charge the stage fare, 4d. to 6d., we would have to cut it into two, and it would be 2d. or 3d., that is what we would have to do.

83. There is another section of a good deal of importance, and that is from Dunedin to Mosgiel, ten miles: what would the fare there be—I mean the second-class fare, the lowest fare?—This plan of mine is as I laid it down was laid down in 1885; since then the movement of popu-

lation will no doubt necessitate an alteration in the stages. It will, however, serve to show the system.

84. *Hon. J. G. Ward.*] Under that diagram the second-class fare would be 8d. and the first-class fare 1s.?—Yes, for two stages; but it all depends on the location of the population, and if you work by whole or half stages.

85. *Mr. J. W. Thomson.*] The next place of importance you come to is the line between Mosgiel and Milton, which passes through a good agricultural district, but there are no towns of any extent. Milton is about thirty-six miles from Dunedin, and a farming district?—It would be 2s. 6d. or 1s. 8d.; but you will kindly bear in mind that the population may have shifted since my plan was laid down.

86. Then, the last branch passes through the same kind of country. It goes right on to Balclutha, about fifty-two miles or thereabouts from Dunedin?—That would be the same fare.

87. How would that happen: how would it be the same fare when Balclutha is about sixteen miles further on?—The principle here in my system is to absolutely ignore the mileage, and to pay attention to the density of population. It is a complete change of system.

88. In speaking of Green Island in my previous questions, I meant Abbotsford. Then you come on through agricultural country till you come to Clinton, which is seventy-four miles from Dunedin?—That is the same fare.

89. Then you come to Gore, which is 100 miles from Dunedin?—2s. or 3s. is generally the 100-mile fare.

90. Then we pass on through country district, and we come to Invercargill, which is 139 miles away from Dunedin: what might the fare there be?—It would probably be 3s. 6d. and 2s. 4d.

91. *The Chairman.*] You say your fare from Dunedin to Invercargill, which is 150 miles, would be 3s. 6d. and 2s. 4d.?—Yes, it would be about that. It depends a good deal on the population.

92. *Mr. Flatman.*] Have you any fare for produce and stock, and that kind of thing?—No, I have not worked it out. It was impossible for me to do it, because I had not the information before me. In working on this question it is necessary for me to avoid doing anything that can be shown to be a loss to the country, and, as I have not had the information with reference to the goods branch of the question, I have not gone into that. Of course, the goods tariff is a most intricate thing, and will require a lot of study and care, and must be gone into very carefully indeed if the country is not to be involved in a loss. It would mean taking all the different classes of goods that are sent on the railways, and the different classes of charges for them, and it would be a very great work of labour, and require the most scrupulous care in order to avoid loss.

93. Then, it would be of no use adopting the passenger-fares under your system until you had the goods system worked out as well?—I think the proper plan is to try it on the passengers first. The Hungarians were running their lines under the system for six years before they touched the goods branch of the question. The system has been adopted in Europe.

94. *The Chairman.*] In connection with this diagram in your book, Mr. Vaile: I find that this pamphlet was issued five years ago?—No. The diagram was, but the book only two years ago.

95. Can you tell me, taking the journey from Auckland to Penrose, what is your fare: is it 6d. and 4d. against the Government's fare of 10d. and 7d.?—Yes.

96. Can you tell me what the Government fare is now?—From Auckland to Penrose the Government fare is 10d. for the first class and 7d. for the second class.

97. Now, take the next stage, to Manurewa, which is fifteen miles: your fare is 1s. first class and 8d. second class, against the Government's fare of 2s. and 1s. 4d.?—Yes.

98. Then, from Auckland to Drury your fare is 1s. 6d. and 1s., against the Government's fare of 2s. 6d. and 1s.?—The Government fare is 2s. 10d. and 1s. 11d.

99. Then, the next stage is from Auckland to Pukekohe: the fare under your system is 2s. and 1s. 4d.?—Yes, against 4s. and 2s. 8d. now. I might remark that you will see that the reductions already made have led to a very great increase in the number of passengers carried.

100. You stated that you would clear at least £1,000,000 a year out of the railways under your system?—I believe it could be done easily.

101. Do you know what the cost of earning that £1,000,000 a year under the Government system would be?—No; but under my system very little more than it is now. I say that we would get that under the stage system easily.

102. I see you say it would be a million and a half?—I believe it would be a million and a half.

103. Do you know what the whole population of the colony is worth to the Railway Department for revenue purposes—for passengers and goods? It is £2 3s. 6d. per head, or, say, practically £2 per head. Under your system the population would have to count up at £4 per head annually to get the same result? Why?—But under the stage system for all traffic they would do it easily.

104. To get the return from the railways you reckon the people of New Zealand would have to contribute double as much to the railways as they do now?—Yes; for the simple reason that our railways are not made use of now to the extent that they might be. I have tried to get an estimate of the proportion of population our railways now serve, or what proportion of our population do now make use of the railways, but I have not succeeded.

105. I want to see how much more they would contribute?—It just depends on what proportion of the people use the railways. So far as I can ascertain, not more than 25 per cent. of them use them, and the other 75 per cent. coming in would make up the extra estimated figure.

106. Do you think an Auckland syndicate would undertake to guarantee the Government against any loss if your system were given a fair trial on the Auckland section of railways?—Yes; there would be no trouble about it on fair terms.

APPENDIX.

New Zealand Government Railways,

SIR,—

Head Office, Wellington, 24th July, 1901.

With reference to your letter of the 22nd instant, forwarding petition from Mr. Samuel Vaile, No. 198 (returned herewith), I have the honour to inform you that on the 19th October, 1900, Mr. Vaile was offered a trial of his system on condition that he or the persons interested therein deposited an amount sufficient to indemnify the department against any loss as a result of the trial. (*Vide Hansard* No. 20, pages 309 to 311, 29th August, 1900.) This offer was declined.

I have nothing to add to my report (copy attached) on a similar petition in 1895.

I have, &c.,

T. RONAYNE,

General Manager.

The Chairman, Railways Committee, House of Representatives.

Enclosure.

New Zealand Government Railways,

SIR,—

Head Office, Wellington, 19th July, 1895.

With reference to your letter of the 12th instant, enclosing copy of a petition from Mr. S. Vaile (herewith returned), I beg to state that the Vaile system is well known to the officers of the department, who are of opinion that it is quite unsuitable for the New Zealand railways, and that its introduction would involve a very serious loss of revenue.

I am of opinion that no good purpose would be effected by giving this system a trial, but should the Government desire to give it a trial on any isolated section, I strongly recommend that the revenue of the department be protected from any loss which such trial might involve.

I have, &c.,

T. RONAYNE,

General Manager.

The Chairman, Railways Committee, House of Representatives.

New Zealand Government Railways, Head Office,

SIR,—

Wellington, 11th October, 1901.

I have the honour to report as follows on the petition of Mr. Samuel Vaile :—

It is represented by the petitioner that the financial results of the Hungarian zone system have been such as to justify the adoption of his stage system. Although statistics are furnished by the petitioner showing a large increase of business and a relatively much lower increase of the earnings, no reliable information is available with regard to the expenditure incurred in working the increased traffic: without this information the statements made with regard to the extraordinary success of the Hungarian system are valueless.

From the fact that the Hungarian zone system has been altered in the direction of increasing the fares twice since its inauguration in 1889, it may be assumed that the increased business has been unprofitable, and that the revenue is being gradually absorbed in the increased cost of working. It is doubtless in view of this increased expenditure that the increase of rates was determined upon. Although the department has no figures available to show the increased expenditure in working the Hungarian system, a reliable basis is available on which the cost of working such an increased business in this country may be arrived at. This basis is the actual expenditure incurred in working the increase of traffic in 1901 over the traffic in 1885.

Mr. Vaile's proposal is to apply his stage-system first to the passenger traffic, then to the parcels and other items of coaching, and finally to the goods traffic. The passenger fares and the maximum goods rates which are proposed to be charged are supplied on page 26 of Mr. Vaile's "Social Problems," the goods rates being in many cases less than one-third of our existing rates. It is stated by Mr. Vaile in his evidence that if three-fourths more passengers travelled at his proposed fares the same passenger revenue would be obtained as at present. The goods rates being on an average not more than half the existing rates, it would require at least double the volume of goods traffic to produce the same goods revenue. Assuming, therefore, that the fares and rates proposed by Mr. Vaile were adopted, and that the increased business resulted as predicted, that is, three-fourths more passenger and double the goods traffic required to produce the same revenue, then the expenditure which would be required to work this increased traffic can be readily arrived at, the basis being the actual cost of working a similar increase of traffic, that is the increase of traffic in 1901 over the traffic of 1885.

The table attached shows this increased passenger and goods traffic (producing the same revenue as at present), and the expenditure, computed on the basis before mentioned, the actual cost of working a similar increase of traffic. From this table it will be seen that the expenditure for working this increased business, which on account of the lower rates produces no additional revenue, amounts to £816,112, and that the total expenditure is £1,943,959, being £216,723 in excess of the total revenue. It follows, therefore, that the business at the excessively low fares and rates proposed would be carried on at less than the actual cost, and that the greater the increase of business at these unremunerative fares and rates the greater would be the loss.

Any such radical departure from established methods should not be undertaken without the fullest information as to the probable result, and proof (of which there is a total absence in the evidence of the petitioner) that the earning-power of our railways should not be imperilled.

I have, &c.,

T. RONAYNE,

General Manager.

The Chairman, Railways Committee, House of Representatives.

Showing Increase between 1885 and 1901.

—	Passengers.	Season Tickets.	Parc ls, &c.	Goods.	Revenue.	Expenses.
				Tons.	£	£
1885 ...	3,232,886	8,999	348,218	1,778,140	1,045,712	690,026
1901 ...	6,243,593	82,921	677,185	3,461,330	1,727,236	1,127,847
Increase ...	3,010,707	73,922	328,967	1,683,190	681,524	437,821

Showing Passenger Traffic increased by Three-fourths, and Goods Traffic doubled by Reduction of Passenger Fares and Goods Rates, as proposed by Mr. Vaile.

—	Passeng. rs.	Season Ticket.	Parcels, &c.	Goods.	Revenue.	Expenses.
				Tons.	£	£
1901 ...	6,243,593	82,921	677,185	3,461,330	1,727,236	1,127,847
Three-fourths additional passenger traffic and double goods traffic	4,682,694	82,921	677,185	3,461,330	...	816,112
Total ...	10,926,287	165,842	1,354,370	6,922,660	1,727,236	1,943,959

Loss ... £216,723.

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