

SELECTIONS
FROM
THE RECORDS
OF THE
MADRAS GOVERNMENT.

Published by Authority.

No. XXXVII.

CORRESPONDENCE

ON THE

SCALE OF PASSENGER FARES

AND

GOODS TARIFF,

FOR

THE MADRAS RAILWAY.

PARTS I. AND II.

MADRAS:

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3	Order of Government.		8th July 1856 No. 222.	Directing that a copy of the Consulting Engineer's letter and the Minute recorded thereon by the Honorable Mr. Elliot be forwarded to the Honorable Court in con-	

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54	Government.	Honorable the Court of Directors.	8th July, No 9 of 1856.	nection with the correspondence on the subject of the Rates and Fares for the Madras Railway..... Bring under the consideration of the Honorable Court the correspondence which has passed upon the subject of the scale of Fares and Rules for Passengers Traffic, and Goods' Tariff to be adopted for the Madras Railway and state that, under the strong opinion expressed by the Railway Directors and concurred in by the Court respecting the 4th Class or slow pace Passengers' Train, its introduction has been suspended until further orders. Solicit especial attention to the Consulting Engineer's masterly memoir, and trust that it may serve to remove the objections entertained to the cheap and slow pace Passengers' train, and that the Government may speedily receive the Court's authority for carrying out a measure without which the effects of the Madras Railway will be but very imperfectly developed, and the benefits conferred by it fail to reach the mass of the people of this Presidency.....	15.

FROM LIEUTENANT COLONEL T. T. PEARS, c. b.,

Consulting Engineer for Railways.

TO MAJOR T. A. JENKINS,

Agent and Manager of the

Madras Railway Company.

SIR,

The time seems to have arrived, when it is desirable that the Government should have before them your views regarding the scale of charges to be established on the Madras line when brought into operation. This is a subject demanding careful consideration and involving in all probability reference home and I think therefore that no further time should be lost in entering upon its consideration.

You will doubtless be prepared shortly to submit your views upon the entire system which you would propose to introduce in working your line.

The question of charges may however be considered apart from that system and will probably occupy more time in its discussion. I request therefore that I may be favored at the earliest possible period with your views upon the subject. My own opinion is generally that the tariff should with great facility be rendered very simple at the outset, that the charges should be made as low as possible, that there should be afforded to the poorest class the means of travelling (with the goods) at a moderate fare and very low rate and that the charge for all goods should be alike at the outset, 50 Cubic feet being taken as a ton in all cases of measurement goods.

I have &c.,

(Signed) T. T. PEARS,

Consulting Engineer for Railways.

Madras, 3d March 1855.

FROM MAJOR T. A. JENKINS,
Agent,

TO LIEUTENANT COLONEL T. T. PEARS, C. B.
Consulting Engineer.

R,

1. Agreeably to the request contained in your letter No. 37 dated 1 March last, I have the honor to submit for the orders of the Government, a scale of Fares and Rules for Passenger traffic, also a Goods tariff, for this Railway.

2. I would have wished that the discussion of this subject had been deferred until the arrival of the Traffic Manager in this country. I have, however, obtained information from the Officers of the Bengal and the Bombay Railway, and in making out the accompanying scale have availed myself of valuable suggestions from those Officials, and also from Railway Authorities in London and in Paris.

3. The practice in England is to issue Double Journey tickets to 1st and 2d Class Passengers, but not to the 3rd Class; the issuing of these tickets entails a necessity for keeping many additional sets of book tickets at each station. As a few only can benefit, and that at the expense of many, I beg to recommend that no Return or Double Journey tickets be issued by this Company, except in the case of excursion Trains.

4. The rule in respect to children's tickets in England is to issue only a ticket to the individual, but the clerk has to bring the whole to account, keeping the remaining half of the ticket to dispose of at a future occasion; in some cases, many months after, when he does not again refer to the ticket in his accounts, the second sale being a private transaction, the desirableness of doing away with this very objectionable mode of proceeding was strongly impressed upon me by many Railway accountants; and as children above the age of 3 years occupy a seat, I have made children above that age chargeable full fare.

5. In respect to passengers' Luggage, I have adopted Mr. M. Stephenson's views, which are in accordance with the practice in France—that is Passengers pay for Luggage in excess of a small parcel or repeat bag.

6. I have carefully examined the goods tariff of the two Indian Railways now open, and have made out the rates pretty nearly in accordance with them. The Rules of the East Indian Railway I believe to be the better adapted for this Presidency, and consequently I have adopted them to a greater extent than the other.

I have &c.,

T. A. JENKINS, *Agent*.

Madras, 2d May 1855.

Submitted (with observations) for the orders of Government.

T. T. PEARS,

Madras, 27th June 1855.

Consulting Engineer for Railways.

To THE CHIEF SECRETARY TO GOVERNMENT,

Fort St. George.

MADRAS RAILWAY.

TABLE OF FARES.

Rate of Fares.	First class.			Second class.			Third class.			Remarks.
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	
Per mile.	...	2	...	...	1	...	...	...	4	

RULES.

1. *Fees.* The Company's Servants are forbidden, under penalty of immediate dismissal, from taking any gratuities from the public.

2. *Passengers* will be booked subject to all the Bye Laws and Regulations of the Company. They cannot be re-booked at the intermediate Stations by the same Train in which they are travelling, and Tickets are only available for the Train for which they are issued.

The *Times* shown on this Table are those at which the Trains may be expected to arrive at and depart from the various Stations; but the Company do not guarantee those times being kept under all circumstances.

To prevent disappointment the Public are requested to be at the Railway Stations at least 15 minutes before the time stated on the above Table, and at the time therein named the Booking Offices at the Termini will be closed, and at the intermediate stations 3 minutes before the departure of the Train, after which no Tickets will be issued.

3. *Tickets* must be shewn to the Company's Servants, or delivered to them when demanded. Parties not producing their Tickets are liable to be charged the fare from the most distant station from which the train may have started. They are only available on the day of issue.

Any person who shall attempt to defraud the Company by travelling or attempting to travel upon the Railway without having previously paid his fare, or who shall in any other manner attempt to evade the payment thereof, is subject to a penalty not exceeding twenty Rupees.

4. *Children* under 3 years of age travel free, and above that age are chargeable full rates.

5. *Special Accommodation for Ladies.* A compartment in a 1st class Carriage will be exclusively reserved for Ladies.

6. *Double Journey Tickets* are issued only in cases of Excursion trains.

7. *Passengers' Luggage.* The Company will not be responsible for the safety of Luggage not booked and paid for, and all Luggage, except such as a small Carpet Bag or other article containing personal Baggage, which will not occupy more space than that under the seat of the Carriage taken by the owner of such article. Any Baggage in excess to be charged at the rate of 4 Pie per maund for every mile.

8. *Dogs* cannot be allowed in Passengers' Carriages, but will be conveyed in the Guards' Van at the published rates, which may be seen at all the Stations, and are to be provided by the owner with collars, chains and muzzles.

9. *Horses, Carriages, and Palanquins* must be at the Stations for loading at least 30 minutes before the departure of the Train. A notice of 12 hours is necessary to provide boxes. The Company will in no case be liable for injury to any Horse or other animal of whatever value, when such injury arises wholly or partially from fear or restiveness.

10. *Complaints.* The Company's Servants are strictly enjoined on pain of dismissal, to observe the utmost civility towards Passengers, and any instance to the contrary will be immediately attended to, if mentioned to the Inspector-in-waiting, or addressed to this office.

11. *Natives* wishing to travel at a low rate can hire a van capable of containing 40 persons at 4½ annas per mile to and from the principal Stations; the minimum charge for a short distance will be Rs. 5.

T. A. JENKINS, *Agent*.

MADRAS RAILWAY.

CLASSIFICATION OF GOODS.

Class 1st at $\frac{1}{2}$ a Pie per Maund per Mile.

Stone by measurement	Clay.	Manure.
15 cubic feet per ton.	Chunam or Lime.	Minerals.
Firewood 50 cubic feet	Dye woods.	Sand.
per ton.	Iron, Pigs and bars.	Stone.
Bricks:	Loam.	Wood, Fire wood.
Coal.	Laterite or materials for	
Coke.	roads.	

and such like materials by a slow Train for the purpose.

Class 2d at $\frac{2}{3}$ rd of a Pie per Maund per Mile.

Alum.	Grind stones.	Pitch.
Arrow root.	Gunny bags.	Pulse.
Anvils.	Glue.	Paints in cask.
Bark for tanning.	Gum.	Provisions salted.
Beer, Porter in Casks.	Grass.	Rags packed.
Beetle nuts in bags.	Goods manufactured.	Rape seed.
Bread.	Hay and straw.	Rope packed.
Borax.	Hammers.	Resin.
Beans in bags.	Hardware.	Rice and Paddy in bags
Brushes.	Horns.	Salt and Saltpetre.
Canvas.	Indigo seed.	Safflower.
Coffee.	Jaggery.	Silk raw in cases.
Carpeting.	Iron mongery.	Soda.
Castings metal not ex-	Iron manufactured.	Spades and Shovels.
ceeding 50 Maunds.	Jute.	Spirits in casks.
Chairs.	Lac and Lac dye.	Starch.
Charcoal.	Lead.	Steel.
Clothes.	Leaves not perishable.	Soap in bags.
Cocoanut.	Leather and hides.	Sugar.
Cotton Twist, packed.	Linseed.	Sulphur.
Cordage.	Machinery large.	Tar in casks.
Copper.	Marble.	Tallow in casks.
Cadjan.	Metals, unwrought, such	Tiles.
Deals and Planks.	as Iron, sheet and	Timber.
Dholl and Pease.	hoop &c. Brass, Cop-	Tin.
Flour in bags.	per, Steel, Zinc.	Tobacco.
Fish dried.	Molasses.	Turmeric.
Flax pressed in packs.	Mustard seed.	Wine in casks.
Ghee dried.	Oil cake.	Wire.
Grain.	Oil in Casks.	
	Paper coarso.	

3d Class at 1 Pie per Maund per Mile.

Cotton.	Flax.	Wood.
Coir.	Hemp.	Yarns.

4th Class at 1 $\frac{1}{2}$ pie per Maund per Mile.

Bacon.	Furniture.	Millinery.
Camphor.	Furs and skins cured.	Opium.
Castings and other sin-	Flannels and Cumbles.	Oilman's Stores.
gle article exceeding	Fruit and Vegetables.	Oranges.
50 Maunds.	Ginger.	Perfumery and soap.
China-ware.	Glass packed.	Plated articles.
Cutlery.	Hats--Caps.	Paints.
Drapery.	Hides.	Saddlery and Whips.
Drugs.	Hams, raw and cured.	Spirits in bottles.
Earthenware.	Indigo.	Stationery.
Elephant Teeth.	Machinery, small.	Spices.
Eggs.	Mats.	Tea--Coffee.
Feathers.	Meats.	Toys.
Fish and Game.	Medicines.	Wine bottled.

Plate, Bullion, Money, Bills, and Notes, Jewellery, Watches, Clocks, Musical Instruments, Shawls, Lace, Silks, and all such valuable, hazardous and brittle articles, will not be carried except at special rates. The Railway Company will not be responsible for Trinkets.

A proportional moderate charge, according to the value, bulk and weight for any thing not above specified.

All light and bulky packages, or such as loosely or badly packed, will be subject to measurement and charged at the rate of 3 $\frac{1}{2}$ cubic feet per Maund.

The Company do not undertake to load, unload, collect or deliver Goods, but, to accommodate parties, if required, they will endeavour to do so; and on all such Goods as are delivered by the Company outside the Railway stations, a charge of 2 $\frac{1}{2}$ pie per Maund per mile additional will be made.

A Terminal charge for booking, loading and unloading all separate consignments of Goods will be made at the following rates: Above 25 Seers and not exceeding 6 Maunds, 5 Annas; above 6 Maunds and not exceeding 9 Maunds, 6 annas; above 9 Maunds and not exceeding 15 Maunds, 7 annas: all above 15 Maunds will be calculated at 30 Maunds, and for every 30 Maunds a charge of 8 Annas will be made. For every

single article weighing more than 50 Maunds, a Terminal charge of 2 Rupees for every 30 Maunds, or fractional parts thereof will be made.

Goods to and from the *intermediate* stations charged according to distance at the same rates as above, except goods carried a less distance than 10 miles, which will be charged as 10 miles, and all separate consignments weighing less than 10 Maunds will be charged double the above respective rates per mile, and all above 25 Seers and less than 7 Maunds, $\frac{1}{4}$ of an Anna per Mile per Maund extra.

As a General Regulation all Goods intended to be sent by the Railway must be delivered over to the Clerk of the Goods Department of the station, between the hours of 9 in the morning and 5 in the afternoon, except on Sundays, Christmas-day, and Good Friday, on which days Goods will not be received. The Railway Company do not undertake to send Goods the same day they are delivered, but will do so by the first train the next morning.

All goods left on the Company's Premises above 48 hours for the convenience, or by the desire or neglect of the consignee or consignees will be charged demurrage at the rate of 6 pie per Maund per day.

Aqua fortis, Vitriol, Gun-powder, Lucifer or Congreve Matches, Fire-works and such like combustible articles, not carried, except in Vans for the purpose by special agreement.

Rates for Cattle, Sheep, Goats, Pigs, &c.—Vans containing 8 Cattle, 32 sheep, Goats, Pigs, or Calves will be charged as a single Waggon at the rate of $4\frac{1}{2}$ Annas per mile, to and from the principal stations, or at a proportionate rate per head.

Smaller consignments will be charged at the rate of $4\frac{1}{2}$ Annas per Van per mile, and the minimum charge for a short distance will be Rupees 5.

Single Sheep, Goats, Pigs, or Calves, if carried in the Break Van will be charged the same rates as for Dogs.

Rates for Horses.

A Horse Van with one horse will be charged 3 Annas per mile, with 2 horses $4\frac{1}{2}$ Annas per mile, and with 3 horses 6 Annas per mile; the minimum charge will be Rupees 5.

As Horse Vans will only be kept at the principal stations, notice should be given the day previous of such being required, to prevent disappointment.

An addition of $2\frac{1}{2}$ per cent to be charged upon all Horses above the declared value of Rupees 400, such declaration to be signed by the owner or his Agent at the time of booking.

The Company will not be responsible for any injury a Horse may receive in being put into, or taken out of, a Van, or any hurt or injury which may happen to the carriage or Train by which it is conveyed. Each Horse must be in charge of a Groom, and at the station 30 minutes before the time of starting.

Rates for Carriages.

Carriages will be conveyed to and from the principal stations at the rate of 6 Annas per mile for all distances less than 50 miles; above 50 miles at the rate of 5 Annas per mile.

Two wheeled Carriages, such as Buggies, not exceeding 50 miles, 5 Annas per mile; exceeding 50 miles, 4 Annas per mile.

Palanquins, not exceeding 50 miles, 4 Annas, exceeding 50 miles, 3 Annas per mile.

Rates for Dogs.

Rates for Dogs for any distance less than 10 miles to be 6 Annas, and for other distances according to the following Table viz.

		Rupees.	Annas.
Above 10 and not exceeding	20 miles,	0	10
	20	0	15
	40	1	4
	60	1	14
	80	2	8
	100	3	0
	200	4	0

And for every additional 100 miles at the rate of 1 rupee *extra*. Dogs must be pre-paid.

Dogs will be conveyed in a compartment of a Carriage provided for the purpose, and will not be allowed in the Carriages with passengers.

Rates for Parcels.

Parcels not considered as Goods, are conveyed at the following rates, including booking and delivery within a mile of the Station and within

the limits of the Town of Madras so soon as arrangements can be made for the purpose.

Distance.	Under 5 Seers.			Weight exceeding 5 seers less 20.		
	Rs.	As.	P.	Rs.	As.	P.
Less than 50 miles.....	...	8	...	...	12	...
Exceeding 50 less 100.....	...	12	...	1	2	...
Exceeding 100 less 200.....	1	...	...	1	8	...
Exceeding 200 for every 10 miles additional.....	...	3	...	...	4	...

Rates for Ice Boxes.

Ice Boxes made water tight will be conveyed at the following rates.

Per Maund.

Rs. As. P.

Above 10 miles and not exceeding 20 miles.....	0	3	0
„ 20 „ „ „ 40 „	0	5	0
„ 40 „ „ „ 70 „	0	10	0
„ 70 „ „ „ 100 „	0	15	0
„ 100 „ „ „ 200 „	1	4	0

The minimum charge will be 3 annas.

The return empty Ice Boxes will be conveyed free. All under 1 Maund will be charged as 1 Maund and all above 1 Maund as 2 Maunds, and above 2 Maunds as 3 Maunds, &c.

The above rates do not include collection and delivery.

Treasure.

Treasure not exceeding 35 Maunds (1 Lack of Rupees) at $2\frac{1}{2}$ Pice per Maund per mile.

Exceeding 35 Maunds, but not exceeding 70 Maunds $2\frac{1}{4}$ Pice per mile.

Exceeding 70 Maunds 2 Pice.

Baggage of Troops.

Baggage of Troops conveyed by rail is to the following extent carried free of charge.

For every 100 men.....	2 tons = $54\frac{1}{2}$ Maunds.
General Officer.....	lbs. 600 = $7\frac{1}{2}$ do.
Brigadier.....	„ 500 = $6\frac{1}{4}$ do.
Field Officer.....	„ 400 = 5 do.
Captain, Surgeon.....	„ 300 = $3\frac{3}{4}$ do.
Subaltern, Assistant do.	„ 200 = $2\frac{1}{2}$ do.
Native Officer, Warrant Officer and Staff Serjeant, &c.....	„ 160 = 2 do.
Non-commissioned rank and file, Hospital Assistant, Bheesties, Lascars, Drivers, &c., each.....	„ 40 = $\frac{1}{2}$ do.

All baggage in excess of the above will be charged as Merchandise Class IV.

T. A. JENKINS,

Agent.

No. 91.

On a letter (No. 137) from the Agent of the Madras Railway Company, dated the 2nd May, 1855.

OBSERVATIONS BY THE CONSULTING ENGINEER.

1. The Agent at my request submits his views regarding the traffic charges and regulations for the Madras Railway.

2. Since there is every probability of a portion of the line being opened for general traffic by the end of this year—the time seems to have arrived when this question, which is one of great importance should be carefully considered and determined.

3. In framing a scale of charges for one of the Indian Railways there are two classes whose interest are to be kept in view, viz. the proprietors of the Railway and the people of the country.

4. The object of the former is to reap the greatest possible amount of benefit to themselves in the shape of profits. It is to the interests of the latter to get themselves and their goods moved about as quickly and as cheaply as possible.

5. Happily the two separate objects are not quite so incompatible as they appear at first sight; since experience proves that up to a certain point fares, many and cheap, make up a better aggregate traffic than few and dear.

6. There is a question however upon which the proprietors and the people (represented here by the Government) must necessarily be at issue, and that is when the maximum dividend having been established it is to be determined whether this shall be realized by the smaller number of fares at a higher rate, or the greater at the cheaper rate; since such aggregate profit will always be realizable in these two distinct modes. It would be easier for the Company to levy a larger charge on a smaller number of passengers, than a smaller upon a greater number; while the profits might be precisely the same.

7. In such a case the people might justly call upon them to adopt the scale most advantageous to the community at large.

8. The Railways in India have been hitherto constructed at a cost less than any in England, and as low as any of equal quality in the world; I think the people of the country should be allowed full benefit of this cheapness of construction in the lowest possible rates.

9. It seems to me that the charges in Bengal and Bombay (by which the Agent here appears to have been much influenced in the preparation of the present scale) are too high. The following is the present rate in

		Bengal & Bombay.			
		As.	P.	As.	P.
1st Class Passenger per mile.....		1	6	2	3
2nd do. do.....		0	9	0	10
3d do. do.....		0	3	0	3
1st Class Goods per ton per mile.....		0	8.7	Not	
2nd do. do.....		1	5	yet	
3d do. do.....		2	2	known.	

10. The average charge for passengers the mile in England according to Lardner (1848) was: *d.*

1st Class.....	2.385
2nd do.....	1.620
3rd do.....	0.992

11. For Goods the average was
1.675*d.* per ton per mile.

This was in 1847, later than which I have no returns, but there is little chance of these rates having been raised.

12. The average cost of the English lines has been £35,000 per mile—the maximum hitherto in India is under £10,000.

13. There is no doubt however that to make a line pay the charge must be regulated by the amount of traffic, while on the other hand, the amount of traffic will depend upon the charge. Railway Companies therefore in framing their tariff have to consider well the resources of the field they have to work upon; and so regulate their charges as to create the greatest possible amount of paying traffic.

14. The impossibility of fixing the proper charges with certainty arises from the fact of the total expense attending the conveyance of each unit of traffic, depending upon an unknown and ever varying quantity, in the amount of traffic.

15. The actual cost of transport due to each passenger or ton of goods is very small, and may be considered invariable. The total expense however is made up of such special expenses and of a share of the general expenses; and this latter varies inversely with the number of such units conveyed.

16. The English appear from their published reports never to have got further in analysing their expenses than an average charge "per train per mile;" from which we learn very little; not knowing what the train amounted to; but we may form from it some idea of a paying charge. If therefore we take the Bombay returns as our guide, we there see, that the average expense (all things included) per train per mile was for the half year ending the 31st December 1854, Rs 1-6 or 22 annas: suppose there were 50 passengers, by each train, we should have $\frac{22}{50}$ or about 5½ pice as the total expense per mile of each passenger. If the gross receipts in England are double the expenses, it is considered as giving a good dividend, on Railways averaging an interest (at 5 per cent) of £1,750 per mile. In our case therefore the proportion borne by the gross receipts might be less; and a charge of 9 pice would probably pay well—I say "probably," because this, too, must depend on the amount of traffic. The expenses attendant on the conveyances of the several classes of passengers differ in consequence, not only of the different style in fitting up the carriages, but also of the different proportions which the dead weight bears to the paying weight, and in some cases it is due to a difference in speed.

17. It is proposed by the Agent of the Madras Railway to have, as in Bengal and Bombay, three classes of passengers, all as far as I can

learn to travel in the same train. The fares proposed by the Agent here are as follows :

1st Class 2 Annas per mile.

2nd Class 1 Anna per mile.

3rd Class 4 Pice per mile.

18. I trust the Government will give the people the utmost possible benefit in the use of these highways and I therefore propose to enter somewhat at length into a consideration of this important point.

19. If our object is to meet as far as possible the peculiar requirements of the several Classes of Society in reference to Railway travelling, we may with great propriety consider the community as divided into three classes—

1st. Those who are able and willing to pay for both speed and comfort.

2dly. Those who, as men of business, are able and willing to pay for speed but would rather economize in the matter of comfort ; and

3dly. Those who cannot afford to pay for either high speed or luxury in travelling.

20. We must never forget that speed is one source of expenditure—we should I think lay down as a rule also that every man should pay for his own expenses as well as a share of the profits to the proprietors.

21. Of the above 3 classes the 1st is provided for in the 1st class, the 2d in the 2d class, but where is there provision for the 3d ? If they are to travel at the same speed with the others, we either give it them gratuitously or we exclude from the Railway altogether a large section of the community who could not afford to pay for that speed.

22. A great deal has been said lately both in Bengal and Bombay about “startling” results exhibited on the working of the Railways ; by which it appeared that the 3rd Class (assumed to be the lower Class of Society) was by far the most important and was rapidly increasing. I think the writers on the subject have arrived at hasty and probably unsound conclusions. The fact is, that as those Railways are now worked, the poor people are compelled to go 20 miles an hour, or not at all, while the richer are tempted to go in the 3d class because they get the same speed ; by far the most important part of their money’s worth. It is as if we were to offer the same description of wine in two different rooms, the one handsomely, and

the other poorly furnished, charging half the price in the latter ; and then argue, because the latter was crowded, that only the poorer classes drank wine. I am perfectly satisfied that we shall neither obtain correct statistics of this nature nor fully meet the wants of the people unless we have trains that differ in speed as well as in comfort and accommodation, we should consider too the peculiar habits of the people of India—how different from our own. The distinction of caste once put aside or not permitted to operate, there are far more strongly marked social distinctions among ourselves than among them. Knowing the very different habits and mode of every day life among the various classes in England, one is not surprised to find, that though all go at the same speed the several classes of carriages differing in room and costliness of fittings, find each its separate class of occupants and that the gentlemen prefer paying high in the first class to being crowded with men of a lower grade in society in the third. It is not so here. The mode of life is so much the same with all. Caste has so completely neutralized the influence of wealth, that the rich and poor feel no hesitation in sitting down together : and the whole affair being equally novel to all, one cannot be surprized at seeing the rich native save his money and prefer the third class, seeing that he goes that way as quick as any other.

23. I entertain therefore still the opinion expressed in my report of the 5th March 1851, that there should be a lowest class carried with the goods or (if the number of passengers shows it to be practicable) in a separate train at the “Goods’ pace. In fact though charged of course by the head they might be carried and their expense calculated by weight. We may form some idea of the cheapness with which they might be carried thus. It will be allowed that one Anna per ton per mile would be a paying charge for goods. We may take in this country 15 men to the ton and if we charged them one pie per mile each, we should have a gross receipt of one anna and 3 pice per ton per mile. I think therefore a charge of $1\frac{1}{2}$ pie per mile or one anna for 8 miles would be a paying charge under such circumstances.

* 5th March 1851.

24. In the letter* above quoted I proposed 4 classes of passengers, 3 for the fast train, and one with the goods. I think still that this would be a good arrangement, and that it would be found that the higher classes of Europeans and East Indians and very few natives at first would take the first class—that a large and respectable body constituting the middle class of Europeans and East Indians, the second,—the middle class of natives the third,—and the poor the fourth.

25. I would however modify the charges then proposed and make them as follows :

1st Class per mile.....	0	1	6
2nd Class do	0	0	9
3d Class do	0	0	4
4th Class do(slow train).....	0	0	1½

26. These charges will be found moderate as they appear higher, considering the relative value of money, than those in England or indeed any other country.

27. It is commonly argued against a beginning with low fares, that it is not easy to raise, but very easy to lower hereafter. This may be true in England, but would I suspect be found the reverse of true here. There public opinion is often too strong for Railway proprietors, and is necessarily enlisted on the side of low fares. In India the proprietors would be too strong for any public opinion that can make itself heard and their feeling would probably be in favor of high charges even though not necessarily promoting their true interests. I cannot help noticing here an article in the "Friend of India" upon the subject of the 3rd class, because it shews how much the subject is likely to be misunderstood and how greatly the interests of both Company and people may suffer if this important question of the tariff is not most carefully considered upon correct data and sound principles of calculation.

28. The writer alluded to expresses surprize and pleasure at the great number of people who have flocked into the 3rd class ; and then argues that since the native population have thus shewn a decided preference for the cheaper kind of carriage ; measures must be taken to render them more comfortable for them, forgetting that the object of the lower charge is to accommodate those who cannot afford to pay for comfort, and that to adopt his measures would be to establish permanently a charge at which the Railway Company never contemplated the possibility of carrying all their passengers.

29. I have only to add here that I would calculate the fares in round numbers to the exclusion of fractional part of an anna. Thus, in regard to the 4th class the charge would be for any distance

Under 8 miles.....	1 Anna.
Above 8 and under 16 miles.....	2 Annas.
Above 16 and under 24 miles.....	3 Annas.

30. I now come to a consideration of the Goods :—The charges proposed by the Agent appear identical with those adopted in Bengal.

The Goods however are divided into 4 Classes instead of 3. I imagine both the principles of a discriminating tariff and in a great measure the classification itself are taken from English practice. I much doubt the expediency of introducing either the one or the other here.

31. The Railways in England have frequently to contend against pressing competition on the part of canals and common roads—a competition which is necessarily met by lowering as much as possible the charges on such goods as *they* could carry with advantage.

32. In this country, or at all events in this part of the country, no such reason exists. I cannot but think that the classification of Goods gives rise to an unnecessary complication in the Railway traffic operations. It involves too the exercise of certain inquisitional power which we have always had good reason to dread in this country—some of the articles would be recognized at once but it is impossible to see how others could be distinguished without either accepting the certificate of the sender which in many cases would be worth nothing ; or subjecting him to oppression and extortion on the part of the subordinate Agents of the Company.

33. I think the Company should begin with the simplest possible system a common charge per ton (or maund) per mile on two classes of Goods—measurement and dead weight. The Company should exercise the privilege of charging by either of these rules as they pleased ; or might establish a rule that any goods below certain specific gravity should come under "measurement." If any differences were established in the charges, I think it should be merely between these two descriptions of Goods. The measurement goods requiring more space might be charged more.

34. The charges proposed by the Agent are,

Classes.	Per mile.	
	Per Maund.	Per Ton.
1st Class of Goods.....	½ pie....	A. 1 P. 1
2nd Class of do.	⅔ „ ...	1 5
3rd Class of do.	1 „ ...	2 2
4th Class of do.	1½ „ ...	2 8

35. I have stated that the average charge in England is 1.675*d.* per ton per mile, which is equivalent to 1 A. 2 P. a very little above the lowest of the charges now proposed.

36. On the Belgian Railways it seems according to Lardner that the average receipt for goods per ton per mile during 1847 was 1'34d. or something less than the lowest charge proposed here.

37. When we consider the difference in the original cost of the works here and in those countries, the charge now proposed certainly appears much too high.

38. It may be impossible to hit off at first exactly that scale of charges that shall be fairest to both parties the Railway proprietors and the public, but it must be remembered, that if we begin with high charges to a certain extent prohibitory, we work thenceforward in the dark not having placed ourselves in a favorable position for knowing the capabilities of the country. If we begin with low charges we invite the traffic of all kinds to shew itself; we know thenceforth what we are about and what we have reason to expect, and we can at any time raise our charges if we find that justice and sound policy call upon us to do so. I would recommend that the charges be fixed at the beginning at 8 pice (one penny) per ton per mile. Parcels of course would form a separate class.

39. Having stated that I consider this classification of Goods neither necessary nor desirable, I shall offer no further observations on it; merely adding that I do not understand the principle upon which in all cases the distinction has been drawn between the several classes.

40. The proposed rules and regulations may well be left for future consideration when the Agent will have the assistance of a Traffic Manager experienced in these matters.

41. I would now therefore only suggest, that Government should take into their consideration, and pass their orders upon this question of the tariff; and I trust the views which I have now expressed may meet with their concurrence—that while the charges are framed upon the only sound principle, that of every man paying for what he gets; the scale may be so adjusted and the traffic arrangements so regulated, that the masses of the country may derive the greatest possible amount of benefit from the operations of the Railways.

42. There is one point which if still considered open to discussion—it may be not out of place to notice here. I allude to the weights and measures to be used on the Indian Railways.

43. The Supreme Government has ordered that the Indian Maund of 40 Seers of 80 Tolahs each should be the standard.

44. The question of weights and measures for British India is one confessedly of great difficulty. They differ all over the country at present—in every district—almost in every talook. Whatever measures are introduced on the Railways, will have taken one step towards becoming the universal measure. At present the maund now named is not known in this Presidency. If it be considered desirable to introduce the English Avoirdupois scale, no better opportunity would be found than that offered by the Railway. Another advantage in the use of the ordinary English measure would be, that the accounts and returns of our Indian Railways would be prepared in a form similar to that of all the Railways in the United Kingdom and the Colonies. Whereas to multitudes of readers our returns will be unintelligible, and comparison be rendered impossible by the cost and expenditure of fuel—amount of traffic, and all such particulars of working expenses being rendered in Indian Maunds instead of Tons and Cwts.

45. I would therefore recommend this important subject for reconsideration.

Fort St. George Gazette, 20th
October, 1848.

46. The regulation maund of the Presidency is about equal to 25 lbs Avoirdupois—exactly 30 lbs Troy.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 27th June 1855.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort Saint George.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 193.

Extract from the Minutes of Consultation, under date the 10th August, 1855.

Read the following papers.

From the Consulting Engineer for Railways.

(Here enter 27th June, 1855 No. 91.)

Minute by the Right Honorable the President.

(Here enter 12th July, 1855.)

Minute by the Honorable Sir H. C. Montgomery, Bart.

(Here enter 23d July 1855.)

1. The Consulting Engineer for Railways submits, with his own remarks a Report from the Railway Agent on his proposed scale of Fares and Rules for passenger traffic, and Goods Tariff to be adopted for the Madras Railway.

2. The Agent proposes to have as in Bengal and Bombay three Classes of passengers, all apparently to travel by the same train. The fares suggested are:

1st	Class	2	Annas	per	mile.
2d	do.	1	do.	do.	
3d	do.	4.	do.	do.	

3. Goods not including parcels, are divided by the Agent into four Classes, to pay

Per Maund (Indian) per mile.		Or per ton.	
		As.	P.
1st Class $\frac{1}{2}$ pie		1	1
2d do. $\frac{2}{3}$ do.		1	5
3d do. 1 do.		2	2
4th do. $1\frac{1}{4}$ do.		2	8.

4. The Consulting Engineer considers the passenger fares though assimilating to those of the Bengal and Bombay lines to be too high. They are higher than the rates on the English Railways notwithstanding the great difference between the average cost at which the lines have been constructed in the two countries and the difference of prices, and in the value of money. He strongly urges that the people of this Presidency should be allowed the utmost possible benefit in the use of these highways and consequently that the rates should be as moderate as practicable. Those he would recommend are per mile :

	A.	P.
1st Class.....	1	6
2d do.....	0	9
3rd do.....	0	4

Besides which he would have a fourth Class or slow train to travel with the goods train at the rate of $1\frac{1}{2}$ pice per mile to be calculated however in round numbers to the exclusion of fractional parts of an Anna. Thus the charge would be for any distance

Under 8 miles.....	1	Anna.
Between 8 and 16	2	0
16 and 24	3	0

5. Colonel Pears objects to the Goods Tariff proposed by the Railway Agent as too high and needlessly complicated. He would have only one rate, viz. 8 pice per ton per mile, to be chargeable by weight or measurement according to the option of the Company. Parcels would form a separate charge and so, it is to be presumed, would specie and the other more valuable articles noticed by the Agent.

6. Lastly, Colonel Pears adverts to the standard of weight which has been ordered by the Supreme Government for all Indian Railways, viz. the Indian Maund of 40 Seers of 80 Tolahs, a weigh not known in this Presidency. He submits that if it be considered desirable to introduce the English Avoirdupois scale, no better opportunity could be found than is now presented. One great advantage would be that the accounts and returns of the Indian Railways would be prepared in a form similar to that of all the Railways in the United Kingdom and the Colonies, and not in weights unknown out of India.

7. The Right Honorable the Governor in Council has read the observations of the Agent and of the Consulting Engineer with great attention. He is not disposed to object to the rates proposed by the

Agent for the first and second Class passengers which do not seem to him unreasonable nor higher than will be paid by the parties, European and Native, likely to travel in those Classes. Neither can he quite agree with Colonel Pears that beginning with low fares it would be

easy to raise them afterwards. In the rate for the third Class, it is remarked, the Agent and Consulting Engineer concur.

8. The Governor in Council however entirely goes along with Colonel Pears in his views of the propriety of having a slow train, attached to the Goods train or running separately at the Goods train pace, at very low rates, so as to give the benefit of the rail to the lowest orders, and make its advantages felt as extensively as possible. He would adopt the rates proposed by the Consulting Engineer.

9. The Government also entirely approve of Colonel Pears' proposal that (with certain exceptions to be charged at special rates) all goods be carried at the same rate determined by weight or measurement at the choice of the Company. They approve also the rate recommended by the Consulting Engineer, or 8 pice per ton. The classification proposed by the Agent is complicated and inconvenient, and such as could scarcely be carried out in practice.

10. On the whole then the Governor in Council is in favor of the passenger rates recommended by the Agent—but with a fourth or slow class train at a very low fare—and a single rate of charge, 8 pice per ton for goods. It is however to be presumed that the rates for the Bengal and Bombay Railway were, before adoption, submitted for the approval of the Supreme Government, the Right Honorable the Governor in Council therefore resolves to forward the present papers with his own views upon the subject, as expressed in the preceding paras : to the Most Noble the Governor General for his consideration and that of the Council of India.

11. The question adverted to by the Consulting Engineer in the concluding para : of his observations, viz., as to the system of weights to be used on the Madras Railway—is one of much importance. The Indian Maund, as he has remarked, is unknown in this Presidency. The

Madras standard weights as fixed by the Proclamation of 1846 are given in the margin. But these though ordered to be employed in all Government

Madras Weights.		Avoirdupois.			Troy.		
		lbs.	Oz.	Drs.	lbs.	Oz.	dwt.
3 Tolas	= 1 Pollam.	0	0	6,582 $\frac{1}{2}$	0	0	7 $\frac{1}{2}$
40 Pollams	= 1 Viss ..	3	1	3,748 $\frac{1}{2}$	0	1	2 $\frac{1}{2}$
8 Viss	= 1 Maund.	24	10	15,542 $\frac{1}{2}$	30	0	0

transactions, are by no means in general use among the people—the local weights and measures as observed by Col. Pears differing all over the country in every District and almost in every Talook. The use of the English Avoirdupois weights on the Railways would be attended with this advantage, that it would enable a comparison to be drawn between the English and Indian Railways, the return of each being prepared in terms of a common standard. The Governor in Council would much prefer the adoption for all India of a system of weights and measures which like that of France should rest upon a scientific basis and be adapted to the decimal scale, the difficulties in the way of such an arrangement are no doubt great, but the subject will be brought under the consideration of the Government of India.

Para 40.

12. Colonel Pears proposes that the consideration of the rules forwarded by the Agent for the orders of Government should be postponed until the arrival of the Traffic Managers in this country, whose experience in these matters would prove great assistance in the discussion of the subject.

13. The Governor in Council thinks that the adoption of some of these Rules might be advantageously deferred as suggested, but there are others which, in order to ensure the convenience of the Public, require to be arranged at once. The conveyance of passengers' luggage by railroads in England is often attended with much inconvenience, delay, and confusion—and His Lordship in Council is of opinion that all this may be obviated by system, regularity, and a little attention to the comforts of the passengers.

14. The Agent very properly proposes to require passengers to pay for their luggage, except any small parcel which can be placed under the seat of the carriage occupied by the owner. He however, at the same time, seems desirous of avoiding any responsibility on the part of the Railway Authorities for articles conveyed by them.

15. On some of the Continental railways the arrangements for the conveyance of luggage are very complete. Luggage is weighed, booked, and paid for, and is then placed entirely under the charge of the Railway Officers, the passenger sees no more of it until he arrives at the place of his destination, where on shewing his ticket which he received at the starting point and on which all his packages are described and numbered, they are returned to him.

16. Another great convenience for passengers would be to provide a room in which they could leave any articles they might not desire to carry with them, a small payment being charged on that account.

17. The Agent appears inclined to leave the delivery and even packing of goods to be undertaken, as a matter of accommodation to parties by the Railway Company, and then it is to be performed by them or not as may happen to be convenient. The Government think that no uncertain or indefinite course should be adopted on this point—and that the Railway Company should either undertake to do it positively or decline the work altogether.

18. The Consulting Engineer will communicate these views to the Agent.

(True Extract)

T. PYCROFT,
Chief Secretary to Government.

FINANCIAL RAILWAY DEPARTMENT.

No. 6.

TO THE SECRETARY TO THE GOVERNMENT OF INDIA,
WITH THE MOST NOBLE THE GOVERNOR GENERAL.

SIR,

I am directed by the Right Honorable the Governor in Council to forward, for the purpose of being laid before the Most Noble the Governor General for his consideration and that of the Council of India, a communication* from the Consulting Engineer for Railways, submitting, with his own remarks, a report from the Railway Agent on his proposed scale of Fares and Rules for passenger traffic, and Goods Tariff to be adopted for the Madras Railway.

2. The Agent it will be perceived proposes to have, as in Bengal and Bombay, three classes of passengers, all to travel by the same train. The fares suggested are

1st Class 2 Annas per mile.
2d do. 1 do. do.
3d do. 4 pice do.

3. Goods, not including parcels, are divided by the Agent into four Classes to pay per maund (Indian) per mile

			Or per Ton	
			A.	P.
1st Class	$\frac{1}{2}$ Pie.....		1	1
2d do.	$\frac{2}{3}$ „		1	5
3d do.	1 „		2	2
4th do.	$1\frac{1}{4}$ „		2	8

4. The Consulting Engineer considers the passenger fares, though assimilating to those of the Bengal and Bombay lines, to be too high. They are higher than the rates on the English Railways, notwithstanding the great difference between the average cost at which the lines have been constructed in the two countries, and the difference of prices and in the value of money. He strongly urges that the people of this Presidency should be allowed the utmost possible benefit in the use of these highways, and consequently that the rates should be as moderate as practicable. Those he would recommend are per mile :

	A.	P.
1st Class.....	1	6
2d do.....	,,	9
3d do.....	,,	4

Besides which, he would have a fourth class or slow train to travel with the goods train, at the rate of $1\frac{1}{2}$ pice per mile—to be calculated however in round numbers to the exclusion of fractional parts of an anna. Thus the charge would be for any distance

Under 8	miles	1 Anna
Between 8 and 6	miles	2 do.
Between 16 and 24	miles	3 do.

5. Colonel Pears objects to the goods Tariff proposed by the Railway Agent as too high, and needlessly complicated. He would have only one rate, viz. 8 pice per ton per mile—to be chargeable by weight or measurement according to the option of the Company. Parcels would form a separate charge, and so of course would specie and the other more valuable articles noticed by the Agent.

Plate.
Jewellery.
Watches.
Clocks, &c.

6. Lastly Colonel Pears adverts to the standard of weight which has been ordered by the Supreme Government for all Indian Railways, viz. the Indian Maund of 40 Seers of 80 Tolahs, a weight not known in this Presidency. He submits that if it be considered desirable to introduce the English avoirdupois scale, no better opportunity could be found than is now presented. One great advantage would be that the accounts and returns of the Indian Railways would be prepared in a form similar to that of all the Railways in the United Kingdom and the Colonies, and not in weights unknown out of India.

7. The Right Honorable the Governor in Council has given his best consideration to the observations of the Agent and of the Consult-

ing Engineer. He is not, I am instructed to state, disposed to object to the rates proposed by the Agent for the first and second Class passengers which do not seem to him unreasonable, nor higher than will be paid by the parties, European and Native, likely to travel in those Classes. Neither can he quite agree with Colonel Pears that beginning with low fares, it would be easy to raise them afterwards. In the rate for the third Class, the Agent and Consulting Engineer concur.

8. The Governor in Council however entirely goes along with Colonel Pears in his views of the propriety of having a slow train attached to the goods train or running separately at the goods train pace, at very low rates, so as to give the benefit of the rail to the lowest orders and make its advantages felt as extensively as possible. He would adopt the rates proposed by the Consulting Engineer as specified in para : 4 of this letter.

9. This Government also entirely approve Colonel Pears' proposal that (with certain exceptions to be charged at special rates) all goods be carried at the same rate, determined by weight or measurement at the choice of the Company. They approve also the rate recommended by the Consulting Engineer, or 8 pice per ton. It appears to them that the classification proposed by the Agent is complicated and inconvenient and such as could scarcely be carried out in practice.

10. It will thus be perceived that this Government on the whole is in favor of the passenger rates recommended by the Agent, but with a fourth or slow train Class at a very low fare, and a single rate of charge, 8 pice per ton, for goods. They have not however felt themselves at liberty to pass final orders upon the question, but they have resolved to submit the reports of the Railway Agent and Consulting Engineer, with their own views as expressed in the preceding para : to the Government of India, and to await their instructions. Adverting to the peculiar interest which the Most Noble the Governor General is understood to take in all questions connected with Indian Railways, I have been directed to forward the papers in the first instance to you for submission to His Lordship.

11. The Governor in Council desires at the same time to bring under consideration the question adverted to by the Consulting Engineer in the concluding para : of his observations, viz. as to the system of weights to be used on the Madras Railway, which he considers to be one of much importance. The Indian Maund, as Colonel Pears has re-

The Government of Fort St. George would adopt the passenger Fares proposed by the Madras Railway Company (with the addition of 4th Class by slow trains), and the goods' Rate proposed by the Consulting Engineer.

3d. For passenger Fares, the President in Council would prefer the scale proposed by Colonel Pears, it is the same that has been considered best for Bengal, except that he has increased the 3d Class fare by $\frac{1}{2}$. There is a doubt whether the present Bengal rate of 3 pie per mile is sufficiently remunerative to the Railway Company; and as data for determining the point are still wanting, His Honor in Council does not object to the experiment of an enhanced rate being tried in Madras.

4th. The addition, as proposed by Lieutenant Colonel Pears, of 4th Class which would go by Goods' trains, has been thought of in Bengal also, and His Honor in Council believes that the experiment is only deferred until the supply of rolling stock, and the state of the demand for traffic, will admit of separate Goods trains running daily and regularly. Much consideration however is necessary, and more data than the Government have at present, to fix the proper fare for this 4th Class. The diminution of cost in conveyance will merely be in the consumption of fuel, and slightly in the wear of the Rails and Carriage. Against this must be set the cost of additional service at the station and along the line, and additional precautions against evasion of payment and over-riding, for which the slow pace and frequent stoppages (to allow the other trains to pass) would allow many facilities. The Government of India sanctions the experiment of a slow fourth Class train on the rate proposed by Colonel Pears.

5th. The President in Council assents generally to the principles which Colonel Pears would define the duties of Government towards the Railway Companies on one hand, and the Public, especially the poorer Classes, on the other. It is however His Honor's opinion that when the Railways begin to return large surplus profits, it will be time enough to consider what proportion of these should be applied to the reduction of fares. At the present time it appears to the President in Council that the greatest benefit which can be conferred on India in connexion with Railways, would be to prove beyond dispute that they are a safe and profitable investment of Capital independently of the Government guarantee, and His Honor in Council therefore thinks that Government should be very cautious in adopting any measures of which the obvious or even probable tendency is the diminution of Railway profit

6th: In the proposal contained in the 29th paragraph of the Consulting Engineer's report, though approved by the Government of Madras, the President in Council finds himself unable to concur. Col. Pears would make 4th Class passengers pay in whole Annas, excluding fractions, thus

For distances under 8 miles.....	1 Anna.
„ above 8 and under 16 miles	2 Annas.
„ „ 16 „ 24 „	3 „

but for this sacrifice of accuracy to supposed simplicity, His Honor in Council sees no occasion. If there were a coin representing an Anna, and that coin were the lowest subdivision of a Rupee, there might be the reason for the proposed rule; but as the lowest subdivision in common use is $\frac{1}{64}$ of a Rupee, known here by the name of a "pice", it appears to His Honor in Council equally simple and more just to calculate the Fare table to the nearest pice, adding a small and uniform terminal charge.

7th. The Goods tariff proposed by the Madras Railway Company is rather too much subdivided, and generally too high. The President in Council thinks that the Bengal Goods Tariff, which is the result of much thought and discussion, is a very proper one for a commencement, though His Honor in Council trusts that it may hereafter be found profitable, and therefore expedient, to lower the first Class from $\frac{1}{2}$ pie per Maund per mile.

8th. The proposal of Colonel Pears to reduce the rate for all goods to the dead level of 8 pie per ton per mile, equivalent to about $\frac{2}{5}$ pie per cwt. per mile, has, I am to observe, nothing to recommend it but its simplicity. The universal adoption in Europe of a graduated or discriminating Tariff for Goods is a presumptive argument in its favor, and reasons for this are obvious enough, some goods requiring more care and attention in transport, and involving more responsibility to the carriers than others, their carriage is therefore more costly to the Railway Company. Hence if a uniform Tariff be established, it must be an average one, and on this system, some goods must pay less in proportion to their weight and others more than on a graduated scale. There would thus always be some goods which might afford to pay the lowest rate but which could not afford to pay the average one, and which, therefore, would not be carried at all. The graduated scale on the other hand by allowing a

rate for both will be 3 annas per mile, and if three Horses are sent together by the same sender, the rate for the whole will be 4 annas per mile.

Grooms.—One Groom in charge of each Horse will be allowed to travel free in the same vehicle as the animal.

An insurance rate of $2\frac{1}{2}$ per cent. will be charged on all Horses of the declared value of Rs. 400 or upwards, and a form of conditions under which the Railway Company undertake to carry Horses, must be signed by the sender or his agent.

The lowest charge for sending a Horse will be Rs. 5.

Each four-wheeled carriage will be charged at the rate of 4 annas per mile for the first 50 miles and 2 annas per mile for any further distance.

Each two-wheeled Carriage or Palanquin will be charged at the rate of 3 annas per mile for the first 50 miles and $1\frac{1}{2}$ annas per mile for any further distance.

The lowest charge for sending a four-wheeled Carriage will be Rs. 5 and for sending a two-wheeled Carriage or Palanquin, Rs. 4.

Horses, Carriages or Palanquins should be at the Stations at least half an hour before the departure of the Train by which they are intended to be despatched, and when sent from any other than Howrah or Raneeunge Stations, a day's previous notice should be given in order to prevent disappointment.

Dogs.—Each Dog will be charged 8 annas for any distance not exceeding 30 miles, for lengths above that and not exceeding 50 miles, a charge of 12 annas will be made, and for distances exceeding 50 miles a charge of one rupee will be made.

Goods.—For the rates of Goods, see Goods' Tables which may be had at the Stations on the line, or at the Company's Offices, 29, Theatre Road, Calcutta; and all farther information required by the public, may be had from the Traffic Manager, Howrah.

R. MACDONALD STEPHENSON,

Managing Director and Agent.

CONSULTING ENGINEER'S OFFICE, 25TH MAY 1855.
TIME TABLE AND FARES.—Upwards.

Miles from Howrah.	Intermediate Distances.	UP FROM CALCUTTA.	WEEK DAYS.		FARES FROM HOWRAH TO RANEEUNGE.					
			Morning Train.	Evening Train.	Single Journey.			Double Journey.		
					1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	A. P.
6	6	Howrah, -	h. 9	m. 30	Rs. 10	A. P. 0	A. P. 0	Rs. 0	A. P. 0	Rs. 7
9	3	Bally, -	9	45	0	0	0	0	0	8
12	3	Connagar,* -	9	54	0	0	0	0	0	12
16	4	Serampore, -	10	0	0	0	0	0	0	0
20	4	Budaspore,* -	10	13	0	0	0	0	0	0
24	4	Chanderdagore, -	10	30	0	0	0	0	0	0
29	5	Hooghly, -	10	40	0	0	0	0	0	0
38	9	Mugra, -	11	18	0	0	0	0	0	0
51	13	Pundooah, -	11	55	0	0	0	0	0	0
66	15	Mymaree, -	12	30	0	0	0	0	0	0
75	9	Burdwan, -	2	0	0	0	0	0	0	0
81	6	Junction,* -	2	22	0	0	0	0	0	0
87	6	Bahullah Road,* -	3	37	0	0	0	0	0	0
90	3	Khury Nullah, -	3	57	0	0	0	0	0	0
97	7	Mancoor, -	3	5	0	0	0	0	0	0
103	6	Paneghur, -	3	24	0	0	0	0	0	0
108	5	Banscopa,* -	3	39	0	0	0	0	0	0
115	7	Tumla Nullah,* -	4	13	0	0	0	0	0	0
121	6	Undal,* -	4	30	0	0	0	0	0	0
		RANEEUNGE,			4	10	1	6	0	14

This Train will run to Pundooah only.

Miles from Raneengunge.	Intermediate Distances.	DOWN TO CALCUTTA.	WEEK DAYS.		FARES FROM RANEENGUNGE TO HOWRAH.					
			Morning Train.	h. m.	Single Journey.			Double Journey.		
					1st Class.		2nd Class.		3rd Class.	
					Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
6	6	RANEENGUNGE, - - - - - dep.	10	0	0	0	0	0	0	0
13	7	Undal, * - - - - - dep.	10	15	0	0	0	0	0	0
18	7	Tumla Nullah, * - - - - - dep.	10	37	0	0	0	0	0	0
24	5	Banscopa, * - - - - - dep.	10	49	0	0	0	0	0	0
31	6	Paneghur, - - - - - dep.	11	6	0	0	0	0	0	0
34	7	Mancoor, - - - - - dep.	11	23	0	0	0	0	0	0
40	3	Khury Nullah, - - - - - dep.	11	36	0	0	0	0	0	0
46	6	Bahullah Road, * - - - - - dep.	11	51	0	0	0	0	0	0
55	6	Junction, * - - - - - dep.	12	6	0	0	0	0	0	0
70	9	BURDWAN, - - - - - {arr. dep.	12	30	0	0	0	0	0	0
83	15	Mymaree, - - - - - dep.	1	30	0	0	0	0	0	0
92	13	Pundooah, - - - - - dep.	2	10	0	0	0	0	0	0
97	9	Mugra, - - - - - dep.	2	46	0	0	0	0	0	0
101	5	Hooghly, - - - - - dep.	3	8	0	0	0	0	0	0
105	4	Chandernagore, - - - - - dep.	3	20	0	0	0	0	0	0
109	4	Budapore, * - - - - - dep.	3	37	0	0	0	0	0	0
112	3	Scramapore, * - - - - - dep.	3	47	0	0	0	0	0	0
115	3	Comnagar, * - - - - - dep.	3	57	0	0	0	0	0	0
121	6	Bally, - - - - - dep.	4	6	0	0	0	0	0	0
		HOWRAH, - - - - - arr.	4	30	0	0	0	0	0	0

RULES.

Fees.—The Company's Servants are forbidden, under penalty of immediate dismissal, from taking any gratuities from the public.

Passengers' Luggage.—The Company will not be responsible for the safety of Luggage not booked and paid for, and all Luggage, except such as a small Carpet Bag or other article containing personal Baggage, which will not occupy more space than that under the seat of the Carriage taken by the owner of such article, to be charged at the rate of one anna per Maund for every 3 miles, as per table on the back of the receipt which will be given on payment of the same.

Trains do not yet run on Sundays. Notice of extra Trains and of any alteration in the hours of departure will be duly advertised. The Trains will not stop until further notice at the Stations marked thus*

Horses, Carriages and Palanquins must be at the Stations for loading at least 30 minutes before the departure of the Train.

Dogs cannot be allowed in Passenger Carriages, but will be conveyed in the Guard's Van at the published rates, which may be seen at all the Stations, and are to be provided by the owner with collars, chains and muzzles.

Refreshment Rooms will be open at the principal Stations where the public can be provided with refreshment at fixed rates of charges.

The times shown on this Table, are those at which the Trains may be expected to arrive at and depart from the various Stations; but the Company do not guarantee those times being kept under all circumstances.

To prevent disappointment, the public are requested to be at the Railway Stations at least 15 minutes before the time stated on the above Table, and at the time therein named the Booking Offices at the Termini will be closed and at the intermediate Stations 3 minutes before the departure of the Trains, after which no Tickets will be issued.

Passengers cannot be re-booked at the intermediate Stations by the same Train in which they are travelling, and tickets are only available for the Train for which they are issued.

Double Journey Tickets are available only for the day on which they are issued. Third Class Double Journey Tickets are now discontinued. Monthly or Season Tickets will not be issued at present.

Children under 12 months of age travel free, and Children under 8 years of age are charged half fare.

It is requested that any irregularity on the part of the Company's Servants or incivility to the public, may at once be reported to Mr. John

Hodgson, Chief Locomotive Superintendent and Traffic Manager, at
Howrah.

R. MACDONALD STEPHENSON,
Managing Director and Agent.

Calcutta, March 12th 1855.

GOODS TARIFF.

*Scale of Rates including Locomotive Power and Waggon for Goods
conveyed on the Line of the East Indian Railway.*

1. First Class $\frac{1}{3}$ rd of a pie per maund, or 2 as. 9 pie per 100
maunds per mile.

Bricks,	Iron in Pigs and Bars,	Materials for Roads,
Coal,	Lime or Chunam,	Minerals,
Coke,	Loam,	Sand,
Clay,	Manure,	Stone,

and such like Materials, by a slow Train for the purpose.

2. Second Class $\frac{2}{3}$ rds of a pie per maund, or 5 as. 6 pie per 100
maund per mile,

Alum,	Grain, Barley, Oats and	Oil Cake,
Arrow-root,	Wheat,	Oil in Casks,
Bark for Tanning,	Grindstones,	Paper, Coarse,
Beer and Porter in	Gunny Bags,	Pitch,
Casks,	Glue,	Pulse,
Bread,	Gum,	Rags,
Borax,	Hardware,	Rape Seed,
Brushes,	Hammers,	Rope,
Butter in Casks,	Hay and Straw,	Resin,
Canvas,	Hemp,	Rice,
Carpeting,	Horns,	Salt and Saltpetre,
Castings, Metal, not ex-	India Rubber or Caout-	Salt provisions,
ceeding 50 maunds,	chouc,	Safflower,
Chains,	Indigo seed,	Soda,
Charcoal,	Ironmongery,	Spades and Shovels,
Clothes,	Iron, manufactured,	Spirits in Casks,
Cocoanut,	Jaggree,	Starch,
Cotton Twist,	Jute,	Steel,
Cotton,	Lac and Lac Dye,	Sugar,
Cordage,	Lead,	Sulphur,
Copper,	Lard,	Tar,
Cowries,	Leather and Hides,	Tiles,
Deals and Planks,	Linseed,	Timber,
Doll and Peas,	Machinery, Large,	Tin,
Fire-wood,	Marble,	Tobacco,
Flax,	Metals, such as Spelter	Turmeric,
Flour,	Zinc, Lead, &c.,	Wine in Casks,
Fruits, dried,	Molasses,	Wire.
Ghee,	Mustard Seed,	

3. Third Class 1 pie per maund, or 8 as. 4 pie per 100 maunds
per mile.

Bacon,	Furs and Skins, Cured,	Oranges,
Betel-nuts,	Flannels,	Paints,
Books,	Furniture,	Perfumery and Soap,
Camphor,	Fruits and Vegetables,	Plated articles,
Castings or other Single	Ginger,	Saddlery and Whips,
Article exceeding 50	Glass,	Spirits in Bottles and
maunds,	Hats, Caps and Shoes,	Cases,
China-ware,	Hams, Raw and Cured,	Stationery, General,
Cutlery,	Indigo,	Tea, Coffee and Spices,
Drapery,	Machinery, Small,	Toys,
Drugs,	Mats,	Wine, Bottled,
Earthen-ware,	Meats,	Wools,
Elephants' Teeth,	Medicines,	Yarns, Cotton and Wool-
Eggs,	Millinery,	len,
Feathers,	Opium,	
Fish and Game,	Oilman's Stores,	

4. Plate, Bullion, Money, Bills and Notes, Jewellery, Watches,
Clocks, Musical Instruments, Shawls, Lace, Silks, and all such va-
luable, hazardous and brittle articles; also Vitriol, Turpentine, Gun-
powder, Lucifer Matches, Aqua Fortis, &c., will not be carried except
at special rates. The Railway Company will not be responsible for
Trinkets.

5. A proportionate moderate charge, according to the value, bulk
and weight for any thing not above specified.

6. All light and bulky packages, or such as are loosely or badly
packed, will be subject to measurement, and charged at the rate of $3\frac{1}{2}$
cubic feet per maund.

7. The Company do not undertake to load, unload, collect or de-
liver Goods, but they will endeavour to do so, and accommodate all
parties as much as possible; and on all such Goods as are delivered by
the Company outside the Railway Stations, a charge of $2\frac{1}{2}$ pie per
maund per mile additional, will be made.

8. A Terminal charge for booking, loading and unloading all
separate consignments of Goods, will be made at the following rates:
Above 25 Seers, and not exceeding 6 maunds, 5 annas; above 6 maunds,
and not exceeding 9 maunds, 6 annas; above 9 maunds, and not exceed-
ing 15 maunds, 7 annas; all above 15 maunds will be calculated as 30
maunds, and for every 30 maunds a charge of 8 annas will be made.

For any single article weighing more than 50 maunds, a Terminal charge of Rs. 2 for every 30 maunds or fractional part thereof will be made.

9. Goods to and from the *intermediate* Stations, charged according to distance at the same rates as above except Goods carried a less distance than 10 miles, which will be charged as 10 miles, and all separate consignments, weighing less than 10 maunds, will be charged *double* the above respective rates per mile, and all above 25 Seers and less than 7 maunds, $\frac{1}{4}$ of an anna per maund extra.

10. As a general Regulation, all Goods, intended to be sent by the Railway, must be delivered over to the clerk of the Goods Department of the Station, between the hours of 9 in the morning and 5 o'clock in the afternoon, except on Sundays, Christmas-day and Good Friday, on which days Goods will not be received. The Railway Company do not undertake to send Goods the same day they are delivered, but will do so by the first train next morning.

All Goods left on the Company's Premises above 48 hours, for the convenience or by the desire or neglect of the Consignee or Consignees, will be charged demurrage at the rate of 6 pie per maund per day.

RATES FOR CATTLE, SHEEP, GOATS, PIGS, &c.

11. Vans containing 8 Cattle, 32 Sheep, Goats, Pigs, or Calves, will be charged as a single Waggon at the rate of $4\frac{1}{2}$ annas per mile, to and from the principal Stations, or at a proportionate rate per head.

12. Smaller consignments will be charged at the rate of $4\frac{1}{2}$ annas per van per mile, and the minimum charge for a short distance will be Rs. 5.

13. Single Sheep, Goats, Pigs, or Calves, if carried in the Break van, will be charged the same rates as for Dogs.

RATES FOR HORSES.

14. A Horse van with one horse will be charged 3 annas per mile, with 2 horses $4\frac{1}{2}$ annas per mile, and with 3 horses 6 annas per mile; the minimum charge will be Rs. 5.

15. As Horse vans will only be kept at the principal Stations, notice should be given the day previous of such being required, to prevent disappointment.

16. An addition of $2\frac{1}{2}$ per cent. to be charged upon all Horses above the declared value of Rupees 400, such declaration to be signed by the owner or his agent at the time of booking.

17. The Company will not be responsible for any injury a Horse may receive in being put into, or taken out of, a van, or any hurt or injury which may happen to it when in the van, except such as may be caused by any fault or negligence of the servants of the Company, or by any accident which may occur to the Carriage or Train by which it is conveyed. Each Horse must be in charge of a Groom, and at the Station 30 minutes before the time of starting.

RATES FOR CARRIAGES.

18. Carriages will be conveyed to and from the principal Stations at the rate of 6 annas per mile for all distances less than 50 miles; above 50 miles, at the rate of 5 annas per mile.

19. Two wheeled Carriages, such as Buggies, not exceeding 50 miles, 5 annas per mile; exceeding 50 miles, 4 annas per mile.

20. Palanquins, not exceeding 50 miles 4 annas: exceeding 50 miles, 3 annas per mile.

RATES FOR DOGS.

21. Rates for Dogs for any distance less than 10 miles to be 6 annas, and for other distances according to the following Table, *viz*;

Above 10 and not exceeding 20 miles		Rs. 0	10 As.
20	40	0	15
40	60	1	4
60	80	1	14
80	100	2	8
100	200	3	0
200	300	4	0

And for every additional 100 miles at the rate of 1 rupee *extra*. Dogs must be prepaid.

22. Dogs will be conveyed in a compartment of a Carriage provided for the purpose, and will not be allowed in the Carriages with passengers.

RATES FOR PARCELS.

23. Parcels, not considered as Goods, are conveyed from one Station to another at the following rates, *viz*: not exceeding 5 Seers, charged 8 annas each; and all above 5 Seers, and not exceeding 25 Seers, 16 annas each including booking and delivery, within one mile of the Station, and within the limits of the Town of Calcutta, as soon as arrangements can be made for the purpose.

7. The Consulting Engineer will learn from the reply to a similar reference made from Bombay, the views of the Government of India on the subject of the standard of weight to be used on the Railway. The prescribed standard must therefore be adhered to.

8. Ordered, that a copy of the letter above recorded and its enclosures be furnished to the Consulting Engineer, and that he be requested to call upon the Agent of the Railway Company to submit a revised Table of Fares for Passengers, Goods, Horses, Dogs, &c. and Parcels, according to the rates now sanctioned by the Government of India, and also, after communication with the Traffic Manager, to submit a set of Rules and Regulations.

(True Extract)

T. PYCROFT,

Chief Secretary to Government.

RAILWAY DEPARTMENT,
CONSULTING ENGINEER'S OFFICE.

No. 24.

FROM LIEUT. COL. T. T. PEARS, C. B.

Consulting Engineer for Railways.

TO MAJOR T. A. JENKINS,

Agent and Manager of the Madras Railway Company.

SIR,

I have the honor to forward copy of an Extract from Minutes of Consultation, No. 12, of the 11th Instant, with that of a despatch from the Government of India, having reference to the scale of charges proposed in your letter, No. 137, of the 2d May last, and I have to request

that you will, in accordance with the instructions of Government, prepare and submit with as little delay as possible, a revised table of charges with draft rules and bye-laws for the regulation of the traffic upon your line.

You will observe that the Government of India have sanctioned the adoption of a suggestion made by myself that the poorer classes should have the opportunity given them of travelling at a slow speed at a very low charge, viz. 1½ pies the mile or 8 miles for an Anna. The intention is that they should be at first conveyed with the goods trains but if their number increase sufficiently to warrant such an arrangement they might ultimately constitute a separate train.

No. 2746.

With reference to the 4th para: of Col.

Baker's letter I request your early attention to the arrangement necessary for the conduct of this cheap and probably crowded traffic. I do not anticipate any difficulty in so regulating the entrance and exit of these passengers as to defeat all attempts at fraud. There need be no hesitation in requiring the passengers to be seated some time before the train starts sufficient to enable the proper Officer to satisfy himself that all have taken tickets, and I should think it would be easy to give to the guard of the train the means of knowing how many ought to pass out of the train at each station so as to prevent all chance of over-riding.

Your letter, No. 17, of the 5th Instant, will be laid before Government in a few days.

I have &c.,

T. T. PEARS,

Consulting Engineer for Railways.

Camp Arcot, 24th January 1856.

MADRAS RAILWAY COMPANY
TRAFFIC DEPARTMENT,
29TH DECEMBER 1855.

No. 35.

FROM H. A. FLETCHER, Esq.

Traffic Manager,

TO MAJOR T. A. JENKINS,

Agent and Manager.

SIR,

Referring to your letter dated the 2d May last, addressed to the Consulting Engineer for Railways and to the Extract from Minutes of Consultation, No. 193, for the Financial (Railway) Department dated 10th August, I have the honor to submit the following remarks upon the Fares and Rates to be established upon this Railway.

I submit a Time Table (No. 1.) with proposed Fares for 1st, 2d and 3d Class Passengers, for Horses, Carriages, Dogs, Parcels, and Passengers' Luggage.

1. *Time of Trains.*—I apprehend that the time at which the Trains should run can be arranged when the Line to be opened approaches completion, I beg however to observe that I think not less than Two Trains each way should be run, so that the same accommodation should be offered to those who wish to travel East, as well as to those travelling West.

2. *Fares Passengers.*—I have proposed the following Rates for Passengers.

First Class per mile	Annas 2
Second Class ,, ,,	1
Third Class ,, Pice	6,

no return Tickets.

I. *First and Second Class Passengers.*—You will perceive that I concur with you in opinion that the Fares for First Class Passengers

should be two annas per mile, and for Second Class Passengers one Anna per mile, and that I propose a rate of 6 pice instead of 4 pice per mile for Third Class Passengers.

II. *Third Class, and low Fares, for Passengers.*—In my remarks under this head I beg to draw your attention to para : 8 of Extract from Minutes of Consultation, No. 193, Financial (Railway) Department dated 10th August 1855, inclosed in your letter, No. 137, dated 2d May 1855, I beg to lay before you my reasons for proposing a rate of 6 pice per mile for Third Class Passengers in preference to your proposed rate of 4 pice per mile, and for my not recommending a low rate of Fares as proposed in Rule, No. 11, of your letter, No. 137, dated 2d May 1855, and for strongly recommending that the low scale of charges as suggested by the Consulting Engineer for Railways and concurred in by the Government in para : 8 of Extract from Minutes of Consultation, No. 193, be not carried into practice for the present.

First.—From my practical experience in the Traffic management of the London and South Western Railway in 1846.

Second.—From practical experience in the Traffic management of the Waterford and Kilkenny, Great Southern and Western and other Irish Railways.

Third.—From a consideration of such of the Returns of the Indian Railways as I have had an opportunity of perusing and comparing with the working of other Lines.

III. With reference to the first point, viz. From my practical experience in the Traffic Management of the London and South Western Railway. In 1846, the London and South Western Railway Company added second Class Carriages to those Trains which were First Class only, and Third Class Carriages to those which were First and Second Class, whilst to a Train, which had hitherto conveyed Third Class Passengers only, First and Second Class Carriages were added. The result of this liberal experiment was, a very serious falling off in the Traffic receipts of the Company, which upon analysis was found to result principally from the increased number of Third Class Trains. The Company were compelled after a long trial, a serious loss, and I believe a sincere desire to continue the boon to the public, to return to their original arrangement of one Third Class Train daily each way upon their Line of Railway. They have now 17 Trains running upon their Main Line each way daily, and one only is a Government or Third Class Train. I believe that the experience of

RATES FOR ICE BOXES.

24. Ice Boxes made water tight will be conveyed at the following rates, viz.

			Rs.	As.	P.	
Above 10 miles and not exceeding 20 miles	0	3	0			per md.
" 20 "	40	"	0	5	0	"
" 40 "	70	"	0	10	0	"
" 70 "	100	"	0	15	0	"
" 100 "	200	"	1	4	0	"

the minimum charge will be 3 annas.

The return empty Ice boxes will be conveyed free. All under 1 maund will be charged as 1 maund, and all above 1 maund as 2 maunds, and above 2 maunds as 3 maunds, &c. The above rates do not include collection and delivery.

R. MACDONALD STEPHENSON,

Managing Director and Agent.

CALCUTTA,
19th March, 1855. }

FINANCIAL RAILWAY DEPARTMENT.

No. 12.

Extract from the Minutes of Consultation under date the 11th January, 1856.

Read the following letter from the Secretary to the Government of India.

(Dated 28th November 1855, No. 2746.)

1. In the foregoing letter the Government of India communicate their views and orders on the proposed Scale of Fares and Rates for the Madras Railway, submitted with the observations of the Consulting Engineer under date 27th June last, No. 91.

Passengers per mile.

	A.	P.
1st Class.....	1	6
2nd do.....	0	9
3d do.....	0	4

2. The Government of India prefer the Scale of Passenger fares proposed by Colonel Pears, as being similar to that which has been considered best for Bengal except that the 3d

Class fare has been increased by one-third; and they do not object to the experiment of this enhanced rate being tried at Madras, as it is doubtful whether the present Bengal rate of 3 pie is sufficiently remunerative to the Railway Company. They also sanction the experiment

4th Class.....Pie 1½.

of a slow fourth Class Train on the rate proposed by Colonel Pears, but they do not think

that the fares should be paid in *whole annas* for fixed distance, as suggested in the 29th para: of his Report. They consider that it would be equally simple and more just to calculate the Fare table to the nearest pie, adding a small and uniform terminal charge. Colonel Pears will accordingly submit a Table of Fares for the slow Class Train calculated on this principle.

3. The Government of India do not approve either the Goods Tariff proposed by the Agent of the Railway Company, or the uniform rate of 8 pice per ton per mile suggested by Colonel Pears for all Goods. They think that the Bengal Goods Tariff is a very proper one for a commencement, though it may hereafter be found expedient to lower the 1st Class from ½rd to ¼th pie per maund per mile. This Tariff will therefore be adopted at Madras.

4. With respect to the rates for the conveyance of Horses, Carriages, Dogs and live Stock, the Consulting Engineer will after communication with the Railway Agent on the subject, report on the proposed reduced* rates for Bengal.

5. The rate for parcels proposed by the Agent of the Railway Company is approved by the Government of India.

6. Colonel Pears will communicate to the Railway Agent para: 5 of the letter of the Government of India, regarding the weight of Officers' baggage to be carried free of charge by the Railway.†

* Note. These it is presumed are those entered in the printed Shedule of the East India Railway—no other detail has been transmitted by the Government of India. These however would appear to be actually in operation. They do not include live Stock.

† The Calcutta Gazette of 25th November containing the C. O. of 24th November alluded to by Colonel Baker, is forwarded for his information to be returned.

7. The Consulting Engineer will learn from the reply to a similar reference made from Bombay, the views of the Government of India on the subject of the standard of weight to be used on the Railway. The prescribed standard must therefore be adhered to.

8. Ordered, that a copy of the letter above recorded and its enclosures be furnished to the Consulting Engineer, and that he be requested to call upon the Agent of the Railway Company to submit a revised Table of Fares for Passengers, Goods, Horses, Dogs, &c. and Parcels, according to the rates now sanctioned by the Government of India, and also, after communication with the Traffic Manager, to submit a set of Rules and Regulations.

(True Extract)

T. PYCROFT,

Chief Secretary to Government.

RAILWAY DEPARTMENT,
CONSULTING ENGINEER'S OFFICE.

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Second.—From practical experience in the Traffic management of the Waterford and Kilkenny, Great Southern and Western and other Irish Railways.

Third.—From a consideration of such of the Returns of the Indian Railways as I have had an opportunity of perusing and comparing with the working of other Lines.

III. With reference to the first point, viz. From my practical experience in the Traffic Management of the London and South Western Railway. In 1846, the London and South Western Railway Company added second Class Carriages to those Trains which were First Class only, and Third Class Carriages to those which were First and Second Class, whilst to a Train, which had hitherto conveyed Third Class Passengers only, First and Second Class Carriages were added. The result of this liberal experiment was, a very serious falling off in the Traffic receipts of the Company, which upon analysis was found to result principally from the increased number of Third Class Trains. The Company were compelled after a long trial, a serious loss, and I believe a sincere desire to continue the boon to the public, to return to their original arrangement of one Third Class Train daily each way upon their Line of Railway. They have now 17 Trains running upon their Main Line each way daily, and one only is a Government or Third Class Train. I believe that the experience of

the London and South Western Railway Company is that of most of the English Railway Companies, for excepting where there may be a large manufacturing population or a Pleasure Line, there is seldom more than one Third Class Train daily, and these cases form exceptions to a general rule.

IV. With reference to the Second point, viz. From my practical experience in the Traffic management of the Waterford and Kilkenny, Great Southern and Western, and other Irish Railways.

V. The Railways in the South of Ireland present some features of analogy with those constructed and constructing in India. The country is agricultural, there is almost a total absence of manufactures, and the people are poor. The Railways have cost much less in construction than those in England, and they appeared to present every feature for low Rates and Fares in preference to high Rates. In 1848, the Waterford and Kilkenny Company opened a portion of their Railway for Traffic, their fares were

First Class	1½d.	per mile	equivalent to Anna 1 Pice 1
Second „	1½d.	„ „	„ 0 „ 8½
Third „	½d.	„ „	„ 0 „ 4

Return Tickets were issued at one fare and a half for all these Classes. These fares were continued for a considerable time in order to give them a sufficient trial, and the result was, that the Company failed to pay its working expenses. The Fares were raised to

First Class	2d.	per mile	equivalent to Anna 1 Pice 4
Second „	1½d.	„ „	„ 1 „ 1
Third „	1½d.	„ „	„ 0 „ 7½

The increase of Fares proved so successful in a financial point of view that they were further increased to

First Class	2½d.	per mile	equivalent to Anna 1 Pice 7
Second „	unaltered		
Third „	1d.	per mile	„ 0 „ 8

Third Class Carriages were discontinued except with one Train only each way daily. This further increase in the Fares proved equally satisfactory with the former, by giving an increased receipt. The Great Southern and Western Railway Company of Ireland, comprising 190 miles of Railway, in the month of June last, raised their First and Second Class Fares 10 per cent and diminished the number of their Third Class Trains to one each way daily. The Irish South Eastern, the

Waterford and Limerick, the Waterford and Kilkenny, and the Killarney Junction Companies followed the example. The Fares of these Companies are now

First Class	2½d.	per mile	equivalent to Anna 1 Pice 5
Second „	1½d.	„ „	„ 1 „ 1
Third „	1d.	„ „	„ 0 „ 8

and, I believe, the ordinary fares upon the Irish Lines will be further increased.

VI. *Excursion Traffic.*—I beg to draw your attention to the Excursion Traffic of the United Kingdom as at present conducted. Low fares have been found to succeed in a remarkable degree. The Metropolitan Lines of England run Excursion Trains throughout the Summer as frequently as possible, these Excursions extend beyond the principal Towns and Seaports of their respective Railways or Districts, and reach the principal points of Interest on the Continent as the Rhine, Paris, &c. &c. The Excursion Fares of the London and South Western Railway Company have been as follows:

London to Southampton and back or 156 miles Second Class 6s. 6d. or ½d. per mile, equivalent to pice 4. Third Class 3s. 6d. or ¼d. per mile, equivalent to 2 pic. The Excursion Trains in Ireland have been arranged with similarly low fares, and have succeeded. The Trains, in all cases, have been run with a studious care not to interfere with the receipts of the ordinary Traffic, hence, only, Sundays, Holydays, Races, Fairs and such occasions, as would be most likely to attract large numbers, are made available for excursion Trains. Experience proved that in cases where Trains were advertised on ordinary days of business to run at low Fares, that the Passenger Traffic fell off for a day or two *previous* to the day, upon which the cheap Train was to run, and for a day or two *after*, and that therefore in most cases, the amount gained by the cheap Train was more than lost in the reduction in the regular and ordinary Traffic. These facts which I have noticed frequently and have found to be regarded by other Traffic Managers, have naturally induced great caution in running at cheap Fares, and though I am convinced that under careful supervision as to time and occasion of running, they are profitable to the Railway Company and a boon to the public, they become a positive loss if regularly run, or, if run upon week days, or days *not* set apart for Holydays or Festivals of some kind. My experience of cheap Fares therefore induce the following remark, viz. That when they exist, except under the supervision abovenamed, they invariably draw away Traffic from other Classes, which may have been

arranged for the express purpose of paying the Expenses of the various Departments of the Railway, and persons who could well afford to pay a First or Second Class Fare, are found availing themselves of arrangements which were made for the poorest classes. I regret, therefore, to say that it is my opinion, that cheap Fares by carriages attached to the Goods Train, or running at the Goods Train pace as a regular or daily arrangement would prove ruinous to the ordinary Passenger Traffic of the Railway, but arranged as the Excursion Traffic of Great Britain and Ireland, to take effect upon Holydays and Festivals, and such occasions as would attract large numbers and not interfere with the Ordinary and Regular Passenger Traffic of the Line, they would be found advantageous.

VII. Having endeavoured to lay before you the result of my personal experience of the working of Railways in England and Ireland, I shall presume to offer some remarks upon the Third point, viz. From a consideration of such of the returns of the Indian Railways as I have had an opportunity of perusing and comparing with the working of other Lines.

VIII. I will take first the returns of the Great Indian Peninsula Railway Company, this Line partially opened for Traffic in April 1853, their Fares for

First Class Passengers appear to be Annas 2 per mile.	
Second „ „ „ Pice 10 „	
Third „ „ „ „ 3 „	

IX. This first period from 18th April to 31st December 1853=37 Weeks, 22 miles open, cost of construction per mile including Rolling Stock £9,044, Total £198,969, gives the following results.

Gross Receipts Rs. 89,633 11 4—per mile per week Rs. 110	
Total Expenditure „ 41,144 1 9 „ „ „ 52	

Cost per mile run by Train Rupee 1 4 11

Total Number of Passengers carried and amount received.

First Class No. 8,192—Amount Rupees 11,668 0 0	
Second „ „ 42,477 „ „ 24,200 7 0	
Third „ „ 266,754 „ „ 52,072 8 0	

shewing an average per week of

First Class No. 221—Amount Rupees 315 5 0	
Second „ „ 1148 „ „ 654 1 0	
Third „ „ 7209 „ „ 1,407 5 0	

Balance available for Dividend on a Capital of £198,969, £4,445 or £3.16 per cent per annum.

X. The Second Half year from January 1st to June 30th 1854=25 Weeks, 22 miles open for 17 weeks, and 33 Miles open for 8 weeks. Cost of construction per Mile including Rolling Stock £9,137. Total £315,268, gives the following results.

Gross Receipts Rupees 65,844 10 7—per mile per week Rs. 78 8 4	
Total Expenditure „ 36,637 6 10 „ „ „ 54 8 0	

Cost per mile run by Train Rupee 1-8-2.

Total Number of Passengers carried and amount received.

First Class No. 3,565—Amount Rupee 6,428 12 0	
Second „ „ 19,423 „ „ 12,066 7 3	
Third „ „ 190,088 „ „ 41,223 1 1	

shewing an average per week of

First Class No. 142—Amount Rupees 257 2 0	
Second „ „ 777 „ „ 482 10 6	
Third „ „ 7,603 „ „ 1,648 14 0	

Balance available for Dividend on a Capital of £315,268, £2,677-6-7 or £1.69 per Cent per annum.

XI. The Third Half-year from June 30th to 31st December 1854 = 27 Weeks, 33 miles open for 16 Weeks, and 34½ miles open for 11 Weeks. Cost of construction per mile including Rolling Stock £9,798, Total £338,060 gives the following results.

Gross Receipts Rupees 72,375 7 6—per mile per week Rs. 87 6 6	
Total Expenditure „ 47,407 9 0 „ „ „ 51 10 5	

Cost per mile run by Train Rupee 1-6-10

Total Number of Passengers carried and amount received.

First Class No. 2,987—Amount Rupees 5,403	
Second „ „ 17,927 „ „ 11,808	
Third „ „ 225,124 „ „ 49,074	

shewing an average per week of

First Class No. 110—Amount Rupees 200	
Second „ „ 664 „ „ 437	
Third „ „ 8,337 „ „ 1,817	

Balance available for Dividend on a Capital of £332,060—£2,288,14-5 or £1.35 per Cent per annum.

XII. You will observe that the Cost of construction has been under £10,000 per mile, the Gross receipts have been per week as follows:

Period from 18th April to December 31st 1853.....	Rs. 2,421 2 0
Second Half-year from December 1853 to June 1854 ..	2,528 3 2
Third „ „ June 1854 to December 1854 ..	2,687 3 8

The Cost of working or Total Expenditure on Revenue Account has been as follows:

	Per mile per week.	Per mile run.
Period from April 18th to Dec. 31 1853	Rs. 52 0 0	1 4 11
Second Half-year from Dec. 1853 to June 1854 ..	54 8 0	1 8 2
Third „ „ June to Dec. 1854 ..	51 10 5	1 6 10

The Total Number of Passengers carried and amount received from the opening of the Line 18th April 1853 to December 31st 1854 were

First Class	No. 14,743	Amount Rupees	23,499
Second „	„ 79,827	„ „	48,074
Third „	„ 681,965	„ „	142,369

shewing an average per week of

First Class	No. 165	Amount Rupees	264
Second „	„ 89	„ „	540
Third „	„ 7,662	„ „	1,599

The Dividends per Cent per Annum have been

First Period.....	£3.16	} Being a mean of £2.66
Second Half-year.....	£1.69	
Third Half-year.....	£1.35	

XIII. The Cost of construction including Rolling Stock being under £10,000 per mile, affords a fair opportunity for the success of the undertaking.

XIV. The amount received for Passenger Traffic is quite out of proportion to the large numbers carried.

XV. The Number of the First and Second Classes are small, the bulk being Third Class Passengers.

XVI. I submit a contrast in both respects, that is the amount received in proportion to numbers conveyed and the relative proportion of the First and Second Classes to the Third, by quoting the Half-yearly return of the Great Southern and Western Railway Company of Ireland (190 miles) ending 30th June 1854, with the Half-yearly return of the Great Indian Peninsula Railway Company ending 31st December 1854.

GREAT SOUTHERN AND WESTERN RAILWAY.

	No.	Amount sterling.	Amount in Rupees.
First Class	42,266	18,968 13 10	189,686 14 0
Second Class	91,719	22,644 6 5	226,443 3 0
Third Class	157,378	31,542 19 1	315,429 8 8
	291,363	£73,155 19 4	Rs. 731,559 9 8

GREAT INDIAN PENINSULA RAILWAY.

First Class	2,987	540 6 0	5,403 0 0
Second Class	17,927	1,180 16 0	11,808 0 0
Third Class	225,124	4,907 8 0	49,074 0 0
	246,038	6,628 10 0	66,285 0 0

The Fares of the two Lines are respectively

GREAT SOUTHERN AND WESTERN RAILWAY COMPANY.

First Class	2 $\frac{1}{10}$ d.	or Anna 1 Pie 5 per mile.
Second „	2 $\frac{1}{10}$ d.	„ 1 „ 1 „
Third „	1d.	„ 0 „ 8 „

GREAT INDIAN PENINSULA RAILWAY COMPANY.

First Class	3d.	or Annas 2 0 per mile
Second „	1 $\frac{1}{4}$ d.	or „ 0 10 „
Third „	$\frac{3}{4}$ d.	or „ 0 3 „

XVII. It will be seen, that the following are the proportions that the Third Class bears to the First, and Second, and both Classes together, in both cases.

GREAT SOUTHERN AND WESTERN RAILWAY.

The Third Class in proportion to the First	as 3 $\frac{1}{10}$ to 1
The „ „ „ Second	„ 1 $\frac{1}{2}$ to 1
The „ „ „ both Classes	„ 1 $\frac{1}{6}$ to 1

GREAT INDIAN PENINSULA RAILWAY.

The Third Class in proportion to the First	as 75 to 1
The Third „ „ Second	„ 12 $\frac{1}{2}$ „ 1
The Third „ „ both Classes	„ 10 $\frac{3}{4}$ „ 1

XVIII. I submit to you whether this great difference is not mainly, if not altogether, owing to the higher rate charged for the Third Class in proportion to the First and Second upon the Great Southern

and Western Railway, and the very low rate charged for the Third Class in proportion to the First and Second upon the Great Indian Peninsula Railway.

XIX. I have no doubt that were the Great Southern and Western Railway Company to charge similar fares to those in use upon the Indian Lines, that the result would be the same, viz. a very small number of First and Second Class Passengers when compared with the third Class.

XX. It is worthy of observation that the First and Second Classes have greatly decreased since the opening of the Great Indian Peninsula Railway, whilst the Third Class shews a gradual and large increase.

XXI. I quote the weekly averages as follows :

	First Class.			Second Class.			Third Class.		
	No.	Increase.	Decrease.	No.	Increase.	Decrease.	No.	Increase.	Decrease.
1853 April 18th to December 31st	221	...	...	1148	...	...	7209	...	...
1854 January 1st to June 30th..	142	...	79	777	...	371	7603	394	...
July 1st to December 31st	110	...	32	664	...	113	8337	734	...
Total Decrease.....	...	...	111	...	...	484	...	...	...
„ Increase.....	...	...	...	...	...	...	1128	...	...

The very low rate of Third Class has prevented the development of the First and Second Classes, and has tended rather to decrease the numbers who at the opening of the Railway were disposed to pay the rates of those Classes. The strong temptation of a very low fare will invariably have that effect even upon those who would regard it as the highest indignity to be included in any other than First Class in every respect except upon a Railway, and this feeling pervades, in the end, the whole community, until, as upon the Dublin and Kingstown Railway in Ireland, the lower Class Carriages upon the Railway become fashionable, whilst the first Class runs comparatively empty.

XXII. The working expenses of the Great Southern and Western Railway Company of Ireland, half year ending 30th June 1854, were £12.03 per mile per week or 2s. 3d. per mile run.

The receipts upon this Line were as follows :

		Being per Week.
Passengers.....	£73,155 19 4	£2,813 13 9
Mails.....	16,000 0 0	615 7 8
Other Coaching Traffic...	6,914 7 4	265 18 8
Goods and Cattle.....	41,094 2 10	1,580 10 7
	£137,164 9 6	£5,275 10 8

If Expenditure were charged against the different items of Traffic, they would probably show the following proportions.

	Per Centage on receipts.	Per Mile per week.	Per Mile Run. s. d.
Passengers.....	23.11	6.41	1 2.64
Mails.....	5.10	1.41	0 3.21
Other Coaching Traffic	2.21	0.61	0 1.40
Goods and Cattle	12.98	3.60	0 8.23
	£43.40	£12.03	2 3.48

XXIII. The working Expences of the Great Indian Peninsula Railway Company have been for the half year ending 31st December 1854, £5.05* per mile per week, or 2s. 10.80d. per mile run, which if charged against the different items of Traffic would show

	Per Centage on receipts.	Per Mile per week.	Per Mile Run. s. d.
Passengers	59.84	4.63	2 7.32
Other Coaching Traffic	0.94	0.05	0 0.24
Goods and Cattle.....	4.82	0.37	0 2.52
	£65.60	£5.05	2 10.08

XXIV. It will be seen that the receipts from "Other Coaching Traffic" than Passengers, and from "Goods and Cattle," have been so small, that it is almost unnecessary to separate these items from the

with Passenger Trains. The cost of working some of the Irish Lines is as follows

	Per mile run.
Great Southern and Western Railway	2s. 3½d.
Waterford and Limerick	2 3
Waterford and Kilkenny	2 0
Irish South Eastern	2 3
Killarney Junction	2 3

The two latter Companies are hauled by the Great Southern and Western Company for the sum named, viz. 2.3 per Train Mile, which provides Locomotive power, Maintenance of way, and all Traffic Charges, and in short, every thing. It is obvious therefore that the working Expenses of the Irish Lines are less than those of the Indian Railway, and suggests that the latter cannot afford to carry for less rates than the former, particularly on a Capital equal to nearly £10,000 per Mile when it is borne in mind that some of the Lines mentioned have cost less in construction than the Indian Railways, the Irish South-Eastern Line for instance cost £10,000 per Mile and the Killarney Junction Railway cost a much less sum.

XXV. The Dividend upon the Great Indian Peninsula Line having gradually decreased from £ 3.16. to £ 1.69. and £ 1.35. respectively, would shew that the decrease in the number of the First and Second Class Passengers, and the increase in the number of Third Class, has been felt. They however, I apprehend, cannot, considering the number of Passengers carried and work done, be regarded as satisfactory.

3. Referring to para : 3, of your letter dated 2d May, I beg to say that I fully concur in the advisability of not issuing Return Tickets upon this Railway except in the case of Excursion Trains.

4. Referring to para: 4 of your letter I concur in your proposal to charge full fare for Children above 3 years of age and conveying them free when under that age.

5. Referring to para : 5 I quite agree with your suggestion to charge a small rate for Passengers' Luggage in excess of a small package or Carpet Bag to accompany the Passengers, and be placed under the seat in the Carriage. I agree with you that such Luggage should be charged at the rate of Pice four per Indian Maund per mile.

6. I submit rules and regulations in the enclosed proposed Time Table, No. 1. With reference to Rule, No. 11, upon the Time Table drawn

out by you as per your letter of the 2d May, I do not think it advisable, at present, to establish any system of low fares, and I would strongly recommend that the consideration of the subject may be postponed until we have some experience of the Traffic and requirements of the District.

I. With reference to the Time Table No. 1 as herewith proposed or adoption upon this Railway, you will perceive some alteration in the rules, as proposed by you upon which however I do not think it necessary to make any comment. I have endeavoured to give my reasons for proposing a higher rate for Third Class Passengers, and for not at present running at any lower fare than at the rate of 6 pie per Passenger per mile.

7. *Parcels.*—I have proposed a scale of charges compiled with care from those existing in the United Kingdom, more particularly in Ireland, which have been found to succeed in best developing this important item of Traffic, having at the same time a careful regard for the rates as charged by the different Transit Companies in this Presidency, and I have endeavoured to establish such a mean between the charges, in existence here, and at home, as will, I think, prove alike satisfactory to the Company and the Public. I may instance as a fair criterion of the whole, that the rates now charged by the Transit Companies are as follows :

Present scale of Charges for Parcels weighing as under, by Coolies and Transit Companies.

Distance.	Coolies Load.	7 lbs & under.	14 lbs & under.	28 lbs & under.	42 lbs & under.	56 lbs & under.	84 lbs & under.	112 lbs & under.	140 lbs & under.
15 Miles & under.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
25 „ „	0 10 0	0 5 0	0 5 0	0 5 0	0 5 0	0 10 0	0 10 0	0 15 0	0 15 0
50 „ „	1 8 0	0 12 0	0 12 0	0 12 0	0 12 0	1 8 0	1 8 0	2 4 0	2 4 0
75 „ „	1 10 0	0 13 0	0 13 0	0 13 0	0 13 0	1 10 0	1 10 0	2 7 0	2 7 0
100 „ „	1 12 0	0 14 0	0 14 0	0 14 0	0 14 0	1 12 0	1 12 0	2 10 0	2 10 0

Proposed Scale of Parcels Rates per Madras Railway.

Distance.	7 lbs & under.	14 lbs & under.	28 lbs & under.	42 lbs & under.	56 lbs & under.	84 lbs & under.	112 lbs & under.	140 lbs & under.	Every 28 lbs or fractional part.
15 Miles & under.	A. P.	A. P.	A. P.	A. P.	A. P.	R. A. P.	R. A. P.	R. A. P.	A. P.
25 „ „	2 0 0	4 0 0	4 6 0	5 0 0	5 6 0	6 6 0	7 6 0	9 6 0	0 10 0
50 „ „	2 0 0	4 6 0	5 0 0	6 0 0	7 0 0	8 6 0	10 0 0	12 6 0	1 0 0
75 „ „	2 0 0	5 0 0	6 0 0	7 6 0	9 0 0	11 0 0	13 0 0	15 6 0	1 6 0
100 „ „	2 0 0	6 0 0	7 0 0	8 6 0	10 0 0	12 0 0	14 0 0	16 6 0	1 9 0

8. *Dogs*.—I have proposed a less rate than is charged upon the other Indian Lines, which are in excess of the charges at home. I have also adapted the scale to the distances charged for Parcels.

15 Miles and under	4 Annas.
25 „ „	6 „
50 „ „	8 „
75 „ „	10 „
100 „ „	12 „

for every additional 100 miles 12 Annas.

I think higher rates would be prohibitory.

9. *Horses*.—I have always thought that the rates generally charged for the conveyance of Horses too high, and consequently not calculated to develop a Traffic. I have therefore proposed a less rate than is charged at home. The Irish rate is for one Horse 4d. per mile, for two Horses 7d. per mile, for Three Horses 8½d. per mile. The Indian Railways charge (as you have proposed) one Horse 3 Annas, Two Horses 4½ Annas, and Three Horses 6 Annas, which I consider much too high, I therefore propose to charge one Horse 2 Annas per mile, Two Horses 3 Annas per mile, and for Three Horses 4 Annas per mile. The object of a low rate for Horses is to induce people to travel by affording them the opportunity of conveniently extending their journey, a low rate for Horses therefore may probably add to the Passenger Traffic. I found such to be the case on the Waterford and Kilkenny Line where a special rate at a low charge was made, and it succeeded. The Irish Companies give notice that they will not be held liable for any injury a Horse may receive, and the Ticket or receipt given for the amount charged for conveyance requires a signature to that effect from the sender or owner. I think this a good plan and propose its adoption here, therefore do not think it advisable to charge a per centage above a declared value of Rs. 400 which would imply that the Company were responsible.

10. *Carriages*.—I have proposed a lower rate for Carriages and Palanquins than that hitherto charged upon the Indian Lines. The Indian rates are much in excess of those charged in England or Ireland. The rates in the latter country are for four wheeled carriages 6d. per mile, and for two wheeled carriages 4½d. per mile. The Indian Railway rates are, for Four wheeled carriages 6 Annas per mile under 50 miles; over 50 miles 5 Annas. For two wheeled carriages, as Buggies, under 50 Miles 5 Annas; over 50 miles 4 Annas per mile. For Palanquins,

under 50 miles 4 Annas, above 50 miles 3 Annas per mile. I propose to charge for Four wheeled Carriages 4 Annas per mile; for Two wheeled carriages as Buggies 3 Annas per mile; and for Palanquins 2 Annas per mile; without reference to distance. I think that in this country where no very extended facilities exist for travelling, that the development of Traffics must be much retarded by charging a high rate for Horses and Carriages in both cases, therefore I propose to charge a low or moderate rate, which may have the effect of inducing persons to travel by enabling them to take their Horses and carriages with them by Railway, and thus facilitate their journey to places or into districts in the interior.

11. *Cloak Room*.—Referring to para : 16 of Minutes of Consultation, No. 193, I propose the Establishment of a Cloak room at the Terminal Stations, and that a charge of 6 pice per article, left for the convenience of persons, be made. The charge on the Metropolitan Railways of England is 1d. for each article equivalent to 8 pie of Indian money.

12. *Rate for Ice Boxes*.—Referring to your proposed rate as per your letter, No. 137, for the carriage of Ice Boxes, I think its not necessary to make any special arrangement with respect to them as the ordinary parcel rate is not prohibitory to Ice Boxes being sent as Parcels at the Parcels' rate whilst the rate of Goods per cwt. is rather less than your proposed rate, and I am of opinion that they could be conveniently sent by Goods' Train.

13. *Treasure*.—I concur in your proposed rate for the conveyance of Treasure, viz. "Treasure not exceeding 35 maunds (1 Lac of Rupees) "at 2½ pice per maund per mile, exceeding 35 maunds; but not exceeding 70 maunds 2¼ pice per maund per mile, exceeding 70 maunds 2 "pice."

14. *Baggage of Troops*.—I refer you to Clause 10 of the Contract between the Honorable East India Company and the Madras Railway Company 1852, and beg to point out that no mention whatever is made of any quantity of Baggage for Troops being carried free; from which I infer that Baggage is chargeable as at home, supposing this to be a correct interpretation of the intention of the Government and of the Railway Company at the time of entering into the Contract, I beg to propose that the Baggage of Troops when conveyed by Goods' Train should be charged as per 4th Class of the Goods Tariff, viz. 2 annas or 3d. per Ton per mile, and that when accompanying the Troops by passenger or special Train it should be charged for as passengers' Luggage at the rate of 4

pie per maund per mile. In the event of an order of Government similar to that issued in Bengal as per Calcutta Gazette, No 94, 20th November 1855, being binding upon this Company, I would propose that all Baggage in excess of the quantity to be carried free, should be charged as I have proposed above, viz. as per 4th Class of the Goods Tariff, viz. 2 annas or 3d per Ton per Mile, when conveyed by Goods Train and that when accompanying the Troops by passenger or special Train it should be charged for as passengers' Luggage at the rate of 4 pie per Maund per per Mile.

1. I propose also that the above should apply to all General and Military Stores of the Government as well as to the Baggage of Troops.

I beg to submit for your approval a proposed Classification and Rates for Goods Traffic.

15. *No 2. Classification of Goods.*—You will perceive that I propose to establish four Classes of Goods.

The First Class comprises minerals and such Goods as generally require no covering and are not liable to damage.

The Second Class, comprises principally raw agricultural produce of the lowest class and raw materials.

The Third Class, comprises the most valuable articles of agricultural produce, manufactured Goods, and some imports.

The Fourth Class comprises the better class of every description of Goods whether manufactured or agricultural. I refer you to para: 10 of the Minutes of Consultation.

In arriving at the Classification of Goods and the proposed rates, I have carefully studied the requirements of the Districts beyond and through which the Railway passes. I consider it absolutely necessary to classify the Goods for conveyance upon this Railway, in the same way as practised upon every Railway in the United Kingdom, if not in the world, and I cannot conceive any better way of arranging a Goods' Tariff for any system of conveyance, whether by Road, Canal, or Railway. From the earliest periods Goods have been classified and charged for upon fixed and recognised principles, which may generally, if not always, embrace the specific gravity of the articles, their value and capability of bearing a fair or good rate for carriage, and their liability to damage. I find amongst the Carriers and Bandymen here, that a principle somewhat similar has been practised, some articles from the Country are carried at higher rates than others, and in fact a kind of Classification of

Goods is in existence. I think however that the Classification of Goods by every means of Transit in a great commercial country like England where competition and skill exist in the most eminent degree must prove the necessity of such a course being pursued here, much more satisfactory than any experience or opinion of my own could shew. I therefore venture to hope that at present, or until actual experience can shew the contrary to be the better course, that the fixed and ordinary principle of classifying Goods, and charging for the carriage accordingly may be adopted.

16. *Rates.*—I have proposed the following rates for the different Classes of Goods.

First Class	1½d. per Ton per mile	44 pie per maund per mile.
Second Class	2d. „	58 „
Third Class	2½d. „	73 „
Fourth Class	3d. „	88 „

some few articles, such as musical Instruments, to be charged 50 per cent above the rate of fourth Class.

I think it is very probable that some changes in the classification, if not of the rates may be desirable when we have had more experience by the daily working of the Line, of the particular wants and requirements of the Districts, these alterations if required, I shall have the honor to submit to you from time to time. I have compared the proposed rates with those in existence now, as well as with those which have for some time past been charged by the Carriers and Bandy Owners in the Districts beyond and through which the Railway passes, and I am of opinion that they will, if adopted, insure the Traffic being transferred from the Road to the Railway, and will tend fully to develop the resources of the District. I have been particularly careful that the proposed rates should command the Traffic, at the same time, I have been careful to propose such rates as experience tells me would prove remunerative. The proposed classification and rates therefore, to the best of my judgment, will insure

First, all the present Traffic of the District passing over the Railway in preference to the Road.

Second, the result proving remunerative to the Company.

Third, the full development of the resources of the District. Referring to para: 10 of the Minutes of Consultation, I beg most respectfully to state that I am convinced, judging from my experience of other Railways, that the result of charging a rate of 8 pie per Ton per mile for

every description of Goods could never be satisfactory to any of the interests concerned. I doubt much whether such a rate of charge could pay ordinary working Expenses, I would therefore venture to suggest to you that the better course would be to charge such rates as experience tells us would pay working expenses and enable us to look forward to the payment of all charges against Revenue, the working of the Line being conducted upon the strictest principles of Economy, combined with efficiency. I feel quite confident that if the Company were to carry all Goods at the same rate now, that such an arrangement would not long continue, as experience would show, that Goods requiring care and liable to damage, must bear a higher rate, than those requiring comparatively no care, and with no liability to damage. The proposed rates are lower than those charged upon any Railway in Ireland, where it is in the highest degree essential that rates, as low as possible, should be charged, as the Traffic is principally, if not altogether, agricultural produce, which, upon its arrival in England, has to compete with the English country produce, therefore the cost of conveyance forms a very important consideration.

17. Referring to para: 17 of Minutes of Consultation, you will perceive that I propose, that First Class Goods only, should be loaded and unloaded by the consignor and consignee as is the practice upon nearly every Railway, the other Classes will be loaded and unloaded by the Company except "Hay and Straw" in the 4th Class.

18. Referring to your letter, No. 137, dated 2d May, respecting the rules for Goods Traffic, you will observe that I propose to undertake the collection and delivery of all Goods, which may not be specially consigned to some person to collect and deliver. I cannot however now propose any particular rate for Collection and Delivery, as it can only be by experience that we shall find at what rates parties can undertake the delivery in Madras and other places. I may state generally, that the Company would charge to the public, the amount they pay for such service, and would therefore not incur any loss in the Collection and Delivery of Goods, and that the cost of Delivery in Madras would be from annas four to annas Ten per Ton, according to distance.

19. I have not proposed to make any Terminal charge as proposed by you, I propose that the rates should include all charges, to be made by the Company, therefore Booking and Terminal charges are included in the rates I have proposed.

20. Your proposal for charging not less than the rate for 10 miles I

think would not be found to work well in practice. I therefore propose to charge a minimum rate of one rupee per Ton upon such Goods as would not according to the rates, amount to that sum.

21. *Weights.*—Referring to para: 11 of Minutes of Consultation, I beg to say that I find that Bandy Owners now engaged in carrying into the District through which the Railway runs compute their rates for Goods and Parcels by the lb. Avoirdupois. I think that either a decimal system of weights upon a scientific basis or the English Avoirdupois weights should be brought into use upon the Madras Railway, in practice whatever scale may be laid down, the lb. Avoirdupois will be the real standard so that in the event of the Maund weight being the standard, the Maund will be reduced to lbs. and in reality the Avoirdupois weight will be used. Holding it in consideration that the weights vary in the several localities through which the Railway will eventually pass, I think it would be desirable to adopt the Avoirdupois weight at once as a common standard. This could be printed in the different languages for the information of Natives.

22. *Rates for Cattle, Sheep, Goats and Pigs.*—I have proposed as per Cattle rates,

No. 3. Rates for Cattle, Sheep, Goats and Pigs. These rates are much lower than any I have known in England or Ireland and are lower than those proposed in your letter, No. 137, dated 2d May—but I am of opinion, looking at the value of cattle in this country, that higher rates would be prohibitory. There appears to be a very limited Traffic in the District, in the cattle, Sheep, Goats, and Pigs, as I am informed that few are driven along the roads. This source of Revenue is considerable in other countries and, I think, may be made so here by the adoption of low rates.

23. I trust that you will excuse the freedom with which I have thought it right to speak upon the important subject of the rates and fares to be used upon this Railway. I am deeply impressed with the conviction that very low rates and fares generally applied to Railway Traffic will not prove successful or remunerative, and I have endeavoured to give you the data from which I take this conviction. I have however considerable difficulty in proving what has borne for some time a conviction upon my mind from daily and hourly observations in the practical working of Railways, and it is to be regretted that some of the Companies I have quoted, publish no such returns as would enable me to quote their precise working in support of the views I have endeavoured to put

forth, although I am nevertheless convinced that I am right in the observations I have made. I will, upon a future occasion, forward for your consideration such Forms as I think should be kept upon this Railway for the purpose of shewing the cost of each unit of work done, as Goods per Ton per mile, and passengers per mile. If similar returns be obtained from the other Indian Railways we shall be able to form a correct idea of expenditure and cost of carriage of every description of Traffic. In contemplating the probable receipts of this Line, we should I think remember that we are deprived of one important item of receipts, viz. the carriage of the Mails, and that therefore it is the more necessary that greater care should be taken in the management of the other items of Traffic. I am aware of the advantages gained by this Company in reference to the saving in purchase of land, legal expences, &c. which have proved so injurious to the Railways of Great Britain. At the same time viewing the probable cost of construction of this Railway, and looking at the districts through which we pass, the want of remuneration for the carriage of the Mails, is a serious item to be made up from other sources.

I have &c,

H. A. FLETCHER,

Traffic Manager,

T. A. JENKINS,

Agent and Manager.

MADRAS RAILWAY.

OPEN BETWEEN MADRAS AND TRIVELLUM.

TIME AND FARE TABLE on and after day the day of 1856.

The times shewn in this Table are those at which the Trains are intended to arrive at the various Stations, but the Company cannot guarantee these times being kept under all circumstances, nor do they hold themselves responsible for delay.

Passengers to insure being booked should be at the Stations 10 minutes before the time mentioned in the following Tables. The doors of the Booking Office will be closed punctually at the hours mentioned in these Tables, after which no person can be admitted. Passengers cannot be re-booked at road side Stations to proceed by the Train in which they have arrived.

DOWN TRAINS FROM MADRAS.

Stations.	Trains.	Fares from Madras.											
		Passengers.						Horses.			Carriages.		
								If one property.					
		First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	1 Horse.	2 Horses.	3 Horses.	2 Wheel.	4 Wheel.	Palanquin.
8. Madras.. Depart..		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.			R. A. P.	R. A. P.	R. A. P.
11. Perambore.....		8 0	4 0	2 0	8 0	4 0	2 0						
12. Red Hills.....		1 0	0	0	3 0	0	0						
13. Avady.....		1 10	0	13 0	0	6 6	0						
18. Tinnanore.....		2 4	0	1 2	0	9 0	0						
26. Trivellore.....		3 4	0	1 10	0	13 0	0						
31. Cuddambathoor...		3 12	0	1 14	0	15 0	0						
61. Chinnamapett.....		4 10	0	2 5	0	1 2	6						
53. Companypett.....		5 12	0	2 14	0	1 7	0						
56. Banavaram.....		7 0	0	3 8	0	1 12	0						
54. Amoor.....		8 4	0	4 2	0	2 1	0						
34. Trivellum Arrival.		9 4	0	4 10	0	2 5	0	9 4	13 14	18	8 13	14 18	8 9 4

UP TRAINS TO MADRAS.

Stations.	Trains.	Fares from Trivellum.											
		Passengers.						Horses.			Carriages.		
								If one property.					
		First Class.	Second Class.	Third Class.	First Class.	Second Class.	Third Class.	1 Horse.	2 Horses.	3 Horses.	2 Wheel.	4 Wheel.	Palanquin.
Trivellum Depart.		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.			R. A. P.	R. A. P.	R. A. P.
73. Amoor.....		1 0	0	8 0	0	4 0	0						
17. Banavaram.....		2 4	0	1 2	0	9 0	0						
27. Companypett.....		3 8	0	1 12	0	14 0	0						
36. Chinnamapett..		4 10	0	2 5	0	1 2	6						
43. Cuddampathoor...		5 8	0	2 12	0	1 6	0						
47. Trivellore.....		6 0	0	3 0	0	1 8	0						
55. Tinnanore.....		7 0	0	3 8	0	1 12	0						
60. Avady.....		7 8	0	3 12	0	1 14	0						
53. Red Hills.....		8 4	0	4 2	0	2 1	0						
69. Perambore.....		8 12	0	4 6	0	2 3	0						
73. Madras.. Arrival.		9 4	0	4 10	0	2 5	0	9 4	13 14	18	8 13	14 18	8 9 4

RATES FOR PARCELS, DOGS, AND PASSENGERS LUGGAGE.

Distances.	Parcels.									Dogs.	Passengers Luggage.
	7 lbs. & under.	14 lbs. & under.	28 lbs. & under.	42 lbs. & under.	56 lbs. & under.	84 lbs. & under.	112 lbs. & under.	140 lbs. & under.	Every 28 lbs. or fractional part		
15 Miles & under.	2 0	4 0	4 6	5 0	5 6	6 6	7 6	9 6	10 4 0	} 4 Pice Per Maund Per Mile.	
25 " "	2 0	4 6	5 0	6 0	7 0	8 6	10 0	12 6	1 0 6 0		
50 " "	2 0	5 0	6 0	7 6	9 0	11 0	13 0	1 0 0	1 0 8 0		
75 " "	2 0	6 0	7 0	9 0	11 0	14 0	1 0 0	1 3 6	1 9 10 0		
100 " "	2 0	7 0	8 6	10 0	13 0	1 0 0	1 3 0	1 7 0	2 0 12 0		
Every additional 100 Miles.									12 0		

Passengers can be booked at intermediate stations, only on condition that there shall be room in the Carriages. The Tickets given to Passengers on payment of the fares, will be required to be produced to the Company's Servants or given to them whenever demanded, any Passenger unable or refusing to produce their Tickets are liable to be charged the Fare from the most distant stations. These Tickets are not transferable and are only available on the day of issue. When the Passengers leave the Trains, the Tickets will be required to be given up. Any persons who shall attempt to defraud the Company by travelling or attempting to travel upon the Railway without having previously paid his Fare, or who shall in any other manner attempt to evade the payment thereof, is subject to a penalty not exceeding Rupees Fifty.

Children under three years of age travel free and above that age are charged full fares.

Passengers Luggage.—All Luggage in excess of a small Carpet Bag or other article, containing personal Baggage which will not occupy more space than that under the seat of a Carriage will be charged at the published rates.

N.B. Act. No. 18 of 1854, Clause 9, "No such Railway Company shall in any case be answerable for loss or injury to any passengers Luggage unless it shall have been booked and separately paid for."

Ladies.—A compartment in a First Class carriage will be exclusively reserved for Ladies.

Parcels are received and booked at the Termini and Stations on the Line, all parcels and packages under 56 lbs. weight each are convey-

ed by Passengers Trains *exclusively* at parcels rates, and all parcels weighing above 56 lbs. each are likewise forwarded by Passenger Train and charged at Parcels rates, if "Per Goods Train" be not distinctly marked thereon.

Dogs must be provided with chains and muzzles, without which Company will not be answerable for their safety. Dogs will be confined in a Compartment of a Carriage provided for that purpose, and under no consideration will they be allowed to accompany Passengers inside Carriages.

Horses and Carriages can be conveyed to and from those Stations as shown on the other side, but the Company cannot undertake to forward them by any particular Train. As Horse Boxes and Carriage Trucks are only kept at the principal Stations. Notice should be given the day previous of such being required, and Carriages and Horses must be at the Stations 30 minutes before the time mentioned in these Rules, Each Horse must be in charge of a Groom.

Goods and Live Stock are conveyed on the Railway, full particulars of which may be had at the Stations.

Smoking in the Carriages or on the Stations is prohibited under penalty.

The Company's Servants are prohibited from receiving any gratuities under pain of dismissal.

It is requested that any irregularity may be immediately notified to H. A. FLETCHER, *Traffic Manager, Madras.*

(Signed) T. A. JENKINS,

Agent and Manager.

NO. 2. MADRAS RAILWAY.

REGULATIONS FOR THE CONVEYANCE OF GOODS AND MERCHANDIZE.

All Parcels and Packages under 56 lbs. weight each, (unless they form part of a Consignment of goods exceeding that weight) are conveyed by Passenger Trains exclusively, at parcels rates, and all Parcels and Packages weighing above 56 lbs. each are likewise forwarded by Passenger Trains, and charged at Parcels rates if "per goods Train" be not distinctly marked upon them.

CLASSIFICATION OF GOODS.

First Class.

Bricks, common or fire.	Loam.	Skins (Sheep or Goat)
Coal, Coke clay.	Laterite.	wet.
Gunnam or Lime.	Manure, Minerals.	Tiles Drain, (Floor or
Firewood.	Pitch.	Roof.)
Hides, (wet)	Sand.	
Iron Pig and bar.	Salt.	

Goods in this Class to be conveyed in open Waggon and to be loaded, conveyed and unloaded at the risk and expense of the owners. If not removed within twenty four hours after arrival of Train, demurrage to be charged for each waggon detained by them, at the rate of one Rupee and a half for every day or part of a day, after the Twenty four hours.

Second Class.

Alum.	Empty Bottles (in ham-	Molasses.
Anvils.	pers)	Oil Cake.
Beer, Porter and Ale (in	Flour (in Sack or Bags)	Paper (coarse lapping)
casks.)	Fish (dried)	Paints.
Bones.	Flax pressed in packs.	Pulse.
Beans (in Bags)	Gall Nuts.	Provisions (Salted)
Brooms and broom bun-	Grindstones.	Rope (packed)
dles.	Gunny Bags.	Resin.
Bamboo and Country	Glue.	Rags (packed)
wood.	Grass.	Rice and Paddy (in bags)
Canvas and Sail Cloths.	Grain (of all kinds)	Soda.
Castings, (heavy)	Horns.	Steel in bars and bun-
Chains.	Incense.	dles.
Charcoal in bags.	Indigo Seeds.	Soap nuts in bags.
Cocoanuts.	Iron (Hoop and Sheet)	Sugar.
Cordage.	Jaggery.	Sulphur.
Copper and white me-	do. Palmyra.	Scrap Iron.
tals.	do. Date.	Tar (in casks)
Cadjans.	Lead.	Tallow (in casks)
Cheacoy.	Leather (undressed)	Tamarinds.
Deals and Planks.	Linseed.	Vegetable roots, viz.
Dholl and Pease.	Marble (rough blocks)	Carrots, Potatoes, Par-
Dye Woods.	Mats and Matting.	snips, Turnips.

Third Class.

Arrow root.	Eggs (at owner's risk)	Oil in casks.
Borax.	Farm seeds.	Palm Oil.
Betlenuts (in bags)	Flannel or Cumblics.	Potatoes (in Sacks.)
Bacon,	Fruits (dried and pre-	Pumps.
Beer Porter and Ale (in	served.)	Putty.
bottles)	Ghee (in crocks or chat-	Pipes (Gas and water)
Coffee.	ties)	Raisins (in boxes)
Carpeting.	Groceries.	Rape seed.
Cloth.	Gum.	Sacks (new)
Cotton (raw)	Gates (Wood or Iron)	Sheet copper.
Camphor.	Grease.	Sago.
Cabbages.	Garlic.	Snuff.
Candles.	Hardware.	Spades and Shovels.
Carriage Springs and	Hides (Dry)	Spirits (in casks)
Axles.	Hams (Raw and cured)	Starch.
Cotton Twist packed.	Hoops (Wood or Iron)	Sugar Candy.
Cart Springs and Axles.	Ironmongery.	Saffron.
Cheese.	Iron piping.	Skins (Dry)
Cocoa.	Jute.	Timber.
Cegars.	Leather (dressed)	Tin (Block and Sheet.)
Currants.	Lead, Red and white.	Tobacco
Cuscus.	Machinery (small)	Vegetables (Greens in
Drugs (in casks)	Metals, (unwrought)	Baskets, Hampers or
Dry salteries.	Mustard seed.	crates.)
Earthenware (owner's	Onions.	Wire.
risk)	Oilman Stores.	Wines (in wood)
Elephant Teeth.	Opium.	

Fourth Class.

Baths (shower &c.)	Fish (Fresh)	Models, (wood for cast-
Baggage.	Fruit.	ings)
Bread.	Furs and Skins.	Plated Articles.
Buckets.	Game.	Poultry (dead.)
Brushes.	Ginger.	Plate Glass (owners'
Bed and Bedding.	Gig Shafts.	risk)
Bales, Boxes and Trus-	Glass (packed)	Picture Frames (owners'
ses, Soft Goods.	Hay and Straw. (Each	risk)
Biscuits (in Tins)	waggon to be charg-	Perfumery.
Blankets.	ed as containing 2	Silks, manufactured.
Books.	Tons)	Spirits (in Bottles)
Boots and Shoes.	Haberdashery.	Saddlery.
Castings (light)	Indigo (in chests)	Stationery.
Cutlery.	Ivory.	Toys.
Coach wheels.	Ice.	Tapioca.
Confectionery.	Joiners' work.	Tea.
Cooper's work.	Luggage.	Thread.
Caps.	Limes and Lemons, Or-	Type (Printers')
China ware.	anges.	Wines (in bottles)
Drapery.	Lamps.	Window Glass.
Drugs (in Hampers or	Meat (fresh)	Wool.
Cases.)	Marble (polished)	

Hay and Straw to be loaded and unloaded by the owners, and the waggons to be subject to demurrage, the same as in First Class. With 50 per cent added.

Bonnets (in boxes)	Glass Mirrors (owner's risk.)	Musical Instruments.
Clocks and watches.	Hats (in Crates or Boxes.)	Millinery.
Feathers.		Paintings.
Furnitures.		Poultry (alive.)

The undermentioned Goods will be conveyed by Special Agreement only, viz.

Agricultural Implements not mentioned, and all long and bulky articles requiring extra accommodation whether light or heavy.

Bullion.	Fuze.	Lucifer Matches.
Camphine.	Gun Cotton.	Naptha.
Coin.	Gunpowder.	Plate and Plated Articles.
Fireworks.	Jewellery.	Vitriol and other Acids.

MADRAS RAILWAY.

RATES OF CHARGES.

For the Conveyance of Merchandize and Cattle.

Distance.	To	Goods.								CATTLE.			
		Tonnage rate for Classes.								Head Rate.			
		First Class.		Second Class.		Third Class.		Fourth Class.		Full grown Cattle.	Calves.	Sheep, Pigs & Goats.	Minimum charges.
3½	Perambore.	R. 0	A. 4	P. 0	R. 0	A. 5	P. 4	R. 0	A. 6	P. 8	0	8	0
7½	Red Hills.	0	8	0	0	10	8	0	13	4	1	0	0
13	Avady.	0	12	8	1	1	4	1	5	4	1	10	0
18	Tinnanore.	1	2	0	1	8	0	1	14	0	2	4	0
26	Trivellore.	1	10	0	2	2	8	2	11	4	3	4	0
29½	Cuddambathor.	1	14	0	2	8	0	3	2	0	3	12	0
36½	Chinnamapett.	2	4	8	3	1	4	3	13	4	4	10	0
45½	Companypett.	2	14	0	3	13	4	4	12	8	5	12	0
56	Banaveram.	3	8	0	4	10	8	5	5	4	7	0	0
65½	Amoor.	4	2	0	5	8	0	6	14	0	8	4	8
73½	Trivellum.	4	10	0	6	1	8	7	11	4	9	4	0

See Rates for Cattle, Sheep, &c., No. 3.

The Carriage of Goods "per Ton" will be charged at the above rates. No less charge being made than one Rupee.

Charges for small Packages of Goods.

Distances.		Per Cwt.	
		A.	P.
For 15 Miles and under.		4	0
" 25 "	"	6	0
" 50 "	"	8	0
" 75 "	"	10	0
" 100 "	"	12	0

The Carriage of Goods "per cwt." will be charged at the above rates, no less charge being made than for one cwt.

Rate of charge for Returned Empty Packages.					
Hampers, Cases, Boxes, Hat crates in Laths, Tin cases, Jars in Baskets, Canisters, Barrels and small Casks, Bags, Packs, Sacks and Wrappers.	Biscuits tins & small can-dle Boxes.	Crate Cases and Boxes according to size.	Punch-ions Hhds	Piano forte and such like cases.	
For any Distance.	per Package 8 Pie.	Third Class rates.	Each one to two Annas.	Each three As.	Each eight As.

All Goods will be collected and delivered by the Company unless otherwise directed and consigned. Collection and Delivery will be charged at certain rates, which can be seen at the Stations, and these charges will be in addition to the charges for Railway conveyance.

MADRAS RAILWAY.

REGULATIONS FOR THE CONVEYANCE OF GOODS AND MERCHANDIZE.

1. Every Consignment of Goods when handed to the Company should be accompanied by a *consignment* or *forwarding* Note signed by the *sender* or *senders*.

2. Goods consigned to places *beyond* the Towns upon the Line of Railway will (unless otherwise directed) be forwarded by the ordinary carriers, or means of conveyance, in the various localities, but the Company will not be answerable for any loss, damage, or delay, that may happen to the Goods after leaving the Company's hands.

3. Goods consigned to places to which there are no means of conveyance, will remain at the stations under the same regulations as Goods which are not intended to be forwarded or delivered by the Company.

4. All Goods *not* to be forwarded or delivered by the Company will be at the risk of the owners immediately they are unloaded from the Company's Railway Waggons. They should be sent for and removed at once. If not removed within 48 hours after arrival per Train, they will be liable to charges for storage at the rate of 6 pice per maund

per diem in addition to the previous charges, and if not removed within 3 months they will be disposed of to satisfy the Company's charges.

5. The Company will not be bound to receive or forward any Packages, or Parcels, the contents of which shall not at the time of delivery for conveyance, be declared (if required).

6. Fruit, Fish, Poultry, Game, and other perishable articles not taken away or not paid for forthwith after arrival if directed "to be kept till called for" or to the like effect, or without any legible and intelligible directions or directed to a place not known or refused by the person or at the place to whom or where directed, may be forthwith sold by auction or otherwise, for the benefit of all concerned, and payment or tender of the net proceeds of any such sale, after deducting of the monies due in respect of the carriage of the said Goods, and of all charges and expenses of sale, shall be accepted as equivalent to delivery: and the Company will not be responsible, except by special contract, for any damage arising in respect of any such articles, from the loss of any market, or from non-arrival or non-delivery within any particular time, provided the same arrive and be delivered within a reasonable time.

7. The Company hereby give public notice that they will not be liable for any injury to Marbles, Musical Instruments, Furniture, Toys, or other articles which from their brittleness, fragility, or delicacy of construction are more than ordinarily hazardous, unless they shall be declared in writing and an appropriate rate or charge for the carriage thereof be paid, or contracted to be paid at the option of the Company.

8. The Company will not be liable for any loss of or injury to any Goods put into Wrappers or returned emptied, and declared as such, nor for the non-delivery or mis-delivery of Goods in consequence of the same not being properly directed, nor for the loss of, or injury to any Goods in consequence of the same being improperly packed, nor for loss by breakage or leakage occasioned by bad or imperfect casks or cooperage, nor for loss, waste or damage in consequence of fermentation.

9. The rates for Goods do not include collection and delivery but are only station to station charges.

10. In all cases the delivery of Goods will be considered complete, when the same are unloaded out of the Waggon or Bandy and placed at the door of the Consignee, the cellaring, warehousing, or lofting of them afterwards will be at the owner's risk, so also will be the removal of Goods from the sender's premises into the Waggon or Bandy:

11. In default of payment on demand of any monies due to this Company, in respect of the carriage of any Articles, Goods or Things they will detain and sell the same, or any part thereof, or if the same all have been removed from the premises of the Company, will detain and sell any other Goods within such premises belonging to the party liable to pay such rates or charges, and out of the monies arising from such sale, will retain such monies so due to the Company and all charges and expenses of such detention and sale, rendering the overplus (if any) of the monies arising by such sale, and such of the Goods as shall remain unsold to the person entitled thereto.

12. No credit can be allowed, but all Goods must be paid for either previously to, or at the time of delivery and if payment be refused, the charge for storage or re-delivery must be defrayed in addition to former charges.

13. The Company do not bind themselves to forward Goods from any station by the first succeeding Train, nor to the arrival of the Goods Trains, at any given hour.

14. No Goods business transacted on Sundays, Christmas Day or Good Friday.

15. All Goods intended to be sent per Railway must be delivered to the Clerk of the Goods Department between the hours of 6 A. M. and 6 P. M.

No. 3. MADRAS RAILWAY.

RATES FOR THE CONVEYANCE OF CATTLE.

Distance.	Full Grown.			Calves.			Sheep, Pigs and Goats.			Minimum charge.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
10 Miles.....	...	6	0	...	3	0	...	2	0	1	8	0
20 "	...	7	8	...	3	6	...	2	6	2	0	0
30 "	...	9	4	...	4	0	...	3	0	2	8	0
40 "	...	11	0	...	5	0	...	3	6	3	0	0
50 "	...	12	8	...	6	0	...	4	6	3	8	0
60 "	...	14	4	...	7	0	...	5	0	4	0	0
70 "	1	0	0	...	8	9	...	5	6	4	8	0
80 "	1	2	0	...	9	0	...	6	0	5	0	0

GENERAL NOTICES.

Live Stock to be charged by the Head, according to the above rates. The Minimum charge being made when the Drove is not sufficient to cover the amount of it, at the Head rate.

The following numbers to be loaded in each waggon, viz. 8 Head of Full grown Cattle, 20 Calves, 30 Sheep, Pigs, Lambs or Goats, when the owners objects to load these numbers, the waggons to be charged for, as if containing the above numbers.

Bulls to be charged double the Head rates for fat or full grown Cattle, subject to the minimum charge, whenever a waggon is only partly occupied, the Company to be at liberty to load other stock in it if requisite.

No Drover's Ticket will be given for any quantity less than a Full Truck Load.

N.B.—The Company do not hold themselves liable for any injury or damage occurring to Live Stock while on the Madras Railway and they undertake the conveyance of it only on condition that they be free from all risk and responsibility.—Neither do they pledge themselves to the arrival of the Cattle Trains at any given time. Parties forwarding Stock are requested to give the Station Masters notice for the supply of waggons.

ALL CARRIAGE MUST BE PREPAID.

H. A. FLETCHER,

Traffic Manager.

T. A. JENKINS,

Agent and Manager.

MADRAS RAILWAY COMPANY,
AGENT AND MANAGER'S OFFICE.

No. 17.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, c. b.

Consulting Engineer.

SIR,

1. I have the honor with reference to the 12th Para: of Extract of Minutes of Consultation, No: 193, dated 10th August last, to forward

a report from the Traffic Manager of this Company upon the subject of Rates and Fares to be used upon this Line of Railway.

2. You will observe that the Traffic Manager is of opinion, founded upon an experience of 15 Years gained upon various Lines of Railway in England, during the greater part of that time in the capacity of Traffic Manager, that the Fares of 3d Class Passengers as proposed by me, were set at too low a rate. He recommends that the Fare should not be less than 6 pie or half an anna per mile, and adduces argument in support of his views, as well as why he recommends that there should be no regular Trains run at very low fares at slow rates of speed as proposed by you, at least for the present.

3. In respect to the Goods Tariff also considerable alteration is suggested in the Schedules and in the Rates for Carriage and the Traffic Manager thinks the classification of goods indispensably necessary to ensure our conveying by Railway the staple commodities of this country as well as the manufactured and the more valuable description of Goods

4. As to the Policy of Cheap Fares, I have discussed the subject at very considerable length with Mr. Fletcher and other Officers of the Company who have had experience in the working of Railways and instances in which very low Fares have signally failed, have been pointed out; in some cases by the Receipts not being equal even to the working expenses; in other instances though working expenses were paid, it was not found advantageous for the Interests of the Company to continue to carry at such low Fares—I may adduce the case of two important Lines in England—the South Eastern and the South Western Railways, although my own views were, I confess, in favour of low Rates, I now feel bound to state that they have undergone a change, and I am of opinion that the wiser course will be to adopt a medium Rate of fare, at least in our early career.

5. I do not think the fact of our paying working expenses only would, notwithstanding the guarantee, be considered satisfactory to the Railway Company: nor could it be so in reality to the Government. In the case of the Railway Company there would be no great inducement for shareholders at a future day to invest if the Railway were debarred of all prospect of earning a higher dividend than the guaranteed Rate of Interest: in the case of the Government the effect of such a state of things being to depress the value of the property, assuming that additional sums of money will be required for construction of Railways in this Presidency, the terms which the Government will be compelled to

offer such Companies as our own in order to raise such further sums must consequently be more unfavorable than those they have already made with the Madras Railway Company.

6. That the Government would be affected by such circumstances as those to which I allude, may be shewn in the case of the raising of our last extension Loan, when the 5 per-cent guaranteed shares being at a *premium*, the Honorable the East India Company ruled that $4\frac{1}{4}$ per cent was a sufficient Rate of Interest to induce parties to advance the required Funds. This was clearly demonstrating, as I conceive, that the interest of the Government will in like manner suffer by a *depression* in the value of the property, besides which, if the line merely pays its working expenses, the desire of the Honorable Court of Directors as expressed in Extract Minutes of Consultation, No. 252, dated 6th October 1855, to be relieved from the payment of the dividend in part, is unobtainable.

7. With these facts before me, I beg to recommend urgently that the scale of Rates now proposed by the Traffic Manager be sanctioned by Government.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Madras, 5th January, 1856.

Submitted with observations for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, February, 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort Saint George.

No. 24.

On a letter from the Agent and Manager of the Madras Railway Company, No. 17, dated 5th January 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

Extract Minutes of Consultation, Financial Railway Department, No. 193, 10th August 1855.

The Agent submits, with reference to an order of Government as per margin, a report from Mr. Fletcher, the Traffic Manager of the Madras Railway Company, upon the subject of the rates and fares.

2. The subject appears to have been considered with much care by Mr. Fletcher. It is one of great importance; and one, as I shall presently shew, the consideration of which, if the rates were now to be finally fixed, would be attended with peculiar difficulty. I enter upon its discussion again with some reluctance; not but that I am fully alive to its importance, or that I dread to encounter its difficulties; but because it involves the necessity of a very long paper, with which I am at all times unwilling to occupy the attention of Government, though there must be, as in the present instance, occasions when such a proceeding is unavoidable.

3. It will be seen that the drift of Mr. Fletcher's statements and opinions tend to the support, first of all, of the interests of the Railway Company; and to the assertion, with those interests in view, of the necessity of higher fares than have been (at least in the lower Classes) hitherto adopted on the Indian Railways.

4. Admitting that a Gentleman in the position of Traffic Manager is justified in seeking first the interests of the proprietors whom he serves, I think it will be found that he is in error in assuming that those interests are best promoted by what he calls high fares.

5. Before entering into a detailed notice of this report, I would submit a few observations on points that are frequently overlooked in these discussions; and that have been, some wholly, all more or less, disregarded by Mr. Fletcher.

6. *First.* In looking, as we necessarily and instinctively do, to England for instruction on the subject of Railways, we must never lose sight of the very important points of difference which exist in the circumstances under which Railways were introduced there, and are being introduced here:—There they came, i. e. all the primary trunk lines came to meet an urgent pressing demand; here they come mainly to create that demand. There they were established by, and for a dense population already characterized by industry, wealth, intelligence and energy of the highest order; here they have to do with a people just emerging from a general condition of poverty and degradation.

7. One of the many consequences of this great difference is that it was not till many miles of Railway had been laid down in England to meet the immediate wants of the people, that Railway enterprize there assumed any thing like the character which here it assumes from the first—a ploughing and not a reaping.

8. Our first lines hitherto have failed to pay handsome dividends,

in all probability, because they have not had time to accomplish their work, and every successive extension, involving a claim of additional Capital, and the breaking up of fresh ground, necessarily causes a fall in the average profits precisely as in latter days the branch extensions in England have operated to the temporary depression of share value.

9. *Secondly.* The first object the public, not as represented by shareholders, but the general public, and the Government, have in promoting the introduction of Railways is the good of the people; at the same time it is allowed to be an essential condition that all such public works should be self-supporting, i. e. pay fair interest on the cost of construction, and the working expenses.

10. The question however arises, can this fair interest be expected in such a country as this, at once—or must the promoters of this enterprise, as of all others, wait until the machinery in which they have invested Capital has had time to perform its work to invite customers and create a demand? I think whatever their scale of charges, Railway Companies have no right to expect in such a country as this an immediate payment of high dividends on their shares. If they could reasonably expect it why require a Government guarantee? The object of the guarantee was to obtain for the country better and cheaper transit. If the Government once give up its control over the Railways before this great end has been accomplished, the public money and credit will have been misappropriated.

11. *Thirdly.* There is a maximum amount of profit up to which a Railway is capable of working at each different stage in its existence, and this aggregate is made up of the profit on each unit of work multiplied by the number of such units; and might be equally realized upon several different scales of payment; but the public have a right to demand at least that this profit shall be realized from the lowest charge from which it is obtainable.

This charge it is impossible to find out except by experiment. We know however that as the members of each Class in every country increase in a rapidly progressive ratio as we descend in the scale of wealth till we get near the bottom, the charges must be such as to throw the Railway open to these large masses.

12. *Fourthly.* Since, within certain limits, the quantity of work will be augmented as the charges are reduced; and since the cost of performing each unit of work materially decreases as the aggregate amount of such work done is increased, it is manifestly to the inter-

ests of a Railway Company to lower their charges within such limits; as it is greatly to the interest of society that they should do so.

13. *Fifthly.* High Fares and low Fares are relative terms; and a charge that may be found too low in England, may be too high in India.

14. *Lastly.* It is perhaps most important of all to bear in mind that a high charge does not necessarily give large profits: that to meet proposal for a reduction of fares by the reply that it will reduce profits is to beg the whole question, a question of a most complicated character that can only be solved by careful experiment.

15. The expenses depend in a measure on the quantity of work done, but increase by no means in direct proportion to the amount of that work. The receipts increase as the individual fares increase, and the number of such individuals carried; but the number carried will vary inversely though irregularly (differently in different countries) with the individual charges, so that in lowering the charges, we shall often, and down to certain limits, always get an increase of business, an increase of receipts and of profits.

16. Thus if X is the number of passengers booked when the charge is 4 pice; and after reducing the charge to 2 pice the number booked in the same time becomes Y : then $4X$ which is the aggregate receipt in the one case may be equal to or greater than $2Y$, but it may be and often will be less; the fall in Charge from 4 to 2 having caused an increase in the number of passengers in a higher proportion, say as 3 to 2.

17. In attempting a solution of this difficult problem we turn to the reports of Railway Companies in England and we find no data whatever that help us one step.

Page 306.

18. Lardner in his "Railway Economy" frequently notices this circumstance and in one place says, "We are left absolutely destitute of all statistical data which could afford the slightest aid in such inquiries."

19. M. Belpaire in his admirable report on the Belgian Railways makes most careful use of the data placed at his disposal by the Belgian Railway Officers and affords some very lucid and valuable illustrations of the principles upon which Railways should be managed.

20. He insists, as might have been expected from any thoughtful man, upon the necessity of turning to the best account all the parts of this expensive apparatus, the servants, the buildings, the permanent way, the engines, the carriages, &c., and by a comparison of actual ac-

counts and returns he shows in the following manner the different economical results to be obtained by thus taking different amounts of work out of each different part of the establishment.

21. Generally I would premise that a Railway is not economically worked where the Rails are frequently lying idle (costing interest) where the servants are frequently idle (wasting salary)—where the engines are not worked up to their power (wasting fuel, wear of rail, and interest on Stock)—where the Carriages are not filled (wasting ditto).

22. M. Belpaire shows in the following manner how much the conveyance of each unit (passenger or ton) may be cheapened by increasing the amount of work :—Let

Page 518.

A = The number of Carriages which pass over each myriametre in a year.

D = The average number of Carriages drawn by each engine.

E = The number of units in each Carriage.

F = The average distance travelled by each unit.

Then if A = 30,000

D = 6

E = 12

F = 2 (myriametres.)

The total cost per myriametre for a 3d Class passenger is Francs 0.270. = 3.4 pice per mile. If the above were increased (as they would be by lowering fares) and became :—

A = 100,000

D = 12

E = 20

F = 5

the cost of each 3d Class passenger would become Francs 0.079=1 pie per mile. The same calculations based on actual results apply to goods and bring down the cost from 33.5 pice per ton per mile in one case, to 5.6 pice in another.

23. We thus see in the above case as it concerns passengers that if in the first instance our charge was 5 pice per mile giving a profit of (5—3.4) say $1\frac{1}{2}$ pie, we could afford without loss to reduce it one half, i. e. to $2\frac{1}{2}$ pice, if by so doing we raised the quantity of work to the extent shewn above.

24. I now proceed to consider some of the most important statements in Mr. Fletcher's report, noticing in the margin the several paras : in that report to which my observations refer.

Mr. Fletcher's Report para : 1.

25. Proposes 3 Classes of Passengers at per mile 2, 1, and $\frac{1}{2}$ Anna respectively.

Para : 2.

26. Gives reasons for proposing to charge the 3d or lowest Class passengers 6 pice instead of 4 as proposed by the Agent, and to defer for the present carrying out my views, concurred in by Government as to the carriage of a lower Class at $1\frac{1}{2}$ pie. These reasons are based upon practical experience in England and Ireland, and a consideration of some of the returns of the Indian Railways.

Para : 3.

27. Speaking of his own practical experience Mr. Fletcher relates an experiment made on the London and South Western Railway ; a liberal experiment it seems to have been considered, but as far as I can understand, it appears to have been made upon no sound principles whatever. It seems to have consisted in jumbling up 3d Class carriages intended for the poor with first and 2d Classes intended for the rich, and expensive carriages intended for the higher Classes with the Parliamentary Trains intended for the poor.

28. The experiment may have been based upon some accurate financial calculations ; but it seems to have failed in a financial point of view, and does not seem to me to furnish any argument one way or the other on the question of high and low fares.

29. We read also in this para : that while 17 Trains ran daily upon this main line referred to, one only is a third Class Train ; from which the writer appears to conclude that the people constituting the 3d Class do not travel so much as the others. Unfortunately when Mr. Fletcher passes a few paras : on to the amount of Traffic, he leaves this South Western Railway of England for the great Southern and Western of Ireland.

30. The conclusion however which I draw from the fact of 16—1st and 2d Class Trains running daily on a line and one 3d Class or Parliamentary, are, *first*, that the charges for the lower classes are in a great measure prohibitory, and secondly that from the known proportion between the number of the 3d Class and that of the other two, the 1st and 2d Class travellers must be carried at an extravagant expenditure.

31. In this para : Mr. Fletcher gives the result of his experience on the Waterford and Kilkenny line, whereon it seems they first tried what are considered low charges and continued them for a considerable time. The result was that they failed to pay working expenses ; and they therefore raised their charges and succeeded so well as to be induced to raise them still further.

32. The details of the experiment are not given, nor the time during which the low fares were permitted to operate; and I cannot admit that the bare statement of what the Directors did on the occasion should be received as an evidence of the impracticability of doing that

See para : 104, Parliamentary Train.

which both theory and practice (in other places) agree in shewing to be practicable. As far as we can judge from these experiments they would seem to have been made without reference to any principle beyond that of making each individual pay more for his seat.

33. Believing as I do that Railways have a work to perform before they can reach their maximum of profit, it is quite possible that if contented with a present maximum, a given rate of charge readily realizable from a given though small class of society may yield more at first than a lower charge, the object of which is to operate upon and ultimately draw on to the line a greater mass of people. But the effect of such a policy as this, limiting the use of the Railway to a few and excluding the great bulk of the people is to render both the profits and the usefulness of the Railway limited and nearly stationary.

Para : 6.

* At about 25 miles an hour including stoppages. Letter from the Agent, No. 64, 28th January 1856.

34. In the 6th para : Mr. Fletcher gives his experience of Excursion Trains, and states that passengers are * carried by these trains between London and Southampton at a charge of one farthing or 2 pice a mile; and that these low fares have been found to succeed in remarkable degree.

35. Now I beg the attention of Government to this very important statement. It proves convincingly to my mind that the traffic arrangements on the English Railways are not as a rule conducted on sound principles or upon any sufficient and distinct data. Either in this case the Railway Company made a profit upon each individual passenger after receiving payment from him at the rate of one farthing a mile, and Mr. Fletcher's apprehensions of the injurious effects of low rates are unfounded; or else these Excursion Trains have not paid; and the calculations regarding them have been made upon false or insufficient data.

36. I shall enter fully into this subject hereafter and shall particularly refer to Mr. Fletcher's remarks upon the cheap Trains drawing away travellers from the other classes, in all of which I consider that there is a misunderstanding of the subject as one involving fundamental commercial principles.

Para : 8. &c.

37. In the 8th and following paras : Mr. Fletcher compares the traffic as already reported on the Indian lines with that of the great South Western Railway of Ireland.

38. He takes the returns of the Great Indian Peninsula Railway during three distinct periods, viz,

From 18th April to 13th December 1853... 37 Weeks.
 „ 1st January to 30th June 1854... 6 Months.
 „ 1st July to 31st December 1854... 6 „

and he shews that the working expenses per mile run during these three periods have been

Rupees	1	4	11
„	1	8	2
„	1	6	10

and he further remarks in para : 25 on the falling off in the dividends in each of these periods; but he has failed to notice three very important circumstances, *first*, that the weekly receipts on the gross were steadily increasing. *Secondly*, that during the three different periods referred to there were three different extensions of the line effected that during the

First period	22 miles,
Second	33 „
Third	33 „ at first.
and	34½ „

afterwards were open for traffic—the Capital upon which to declare a dividend being successively increased from £198,969 to £315,268 and again to £338,060; (I have already shewn how, so long as these extensions bear any considerable proportion to the line previously brought into operation—there introduction to the revenue accounts must of necessity lower temporarily the dividend,) and *thirdly* that maintenance of way was, during the first of these three periods, charged against Capital and not against Revenue.

Para : 8 Sup :

Para : 14.

39. In para : 14 Mr. Fletcher states that the amount received for passenger Traffic is quite out of proportion to the large number carried. This is nothing more than to repeat the assertion that the fares are too low. Many people coming from England are astonished to find charges made and prices given in this country, which are quite out of proportion, if measured by an English Standard, to the number of things sold.

40. The fact is if it were not dangerous to refer these questions at all to a foreign standard, I should say that comparing the Railway Charges in Bombay with those at home, and considering the value of money in India and in England, the former were quite out of proportion in another way. Money is about 4 times the value here that it is at home and the amount paid by a 3d Class passenger in Bombay represents therefore at least three half pence; half as much again as the lower Classes of passengers pay in England.

41. Mr. Fletcher submits a contrast between the Great Southern and Western line of Ireland which is 190 miles in length, and the Great East Indian Peninsula which is 34½.

42. He shews the number carried on the two lines in a given time—the money realized—the charges. The charges are as follows

Class.	Irish line.	Indian.
1st.	Anna... 1.5	2.
2d.	,, ... 1.1	10
3d.	,,8	3

43. We then read the proportion that, in these two cases, the 3d Class bears in number to the 1st, and to the 1st and 2d taken together; and Mr. Fletcher laments, apparently, the great difference between the number of the 3d and that of the 1st and 2d on the Indian lines, and submits that it is due to the very low rate charged to the 3d Class in India.

44. It appears however to have escaped his notice that a ratio between any two numbers may be reduced in two ways, viz. either by increasing the one, or by diminishing the other.

45. Now the most remarkable points to be noticed in these comparative Statements are, first, that on a line in Ireland, 190 miles in length 291,363 persons of all Classes were booked in six months, whereas on a line in India of 34½ in length 246,038 persons were booked. Considering the character of the two Countries both in point of wealth and population, this is a most remarkable circumstance and would shew that from some cause or other the Indian Railway has already become more generally available to the great mass of the people than that of Ireland.

46. With regard to the proportion between the several Classes I conclude from the circumstance brought to notice in this report, of the 3d Class on the Irish line being numerically to the 1st and 2d together as 1½ to 1, that the charges for the lower Classes are to a very great ex-

tent prohibitory; and the great mass of the people are not reached by the Railway. The proportion on the Indian Railway being 10½ to 1, is more reasonable but still too low to permit us to think that the railway has been yet thrown open to the poor. Another circumstance which I learn from Lardner appears to support this conclusion, viz. that the average distance travelled by the 3d or lowest Class in England is 14 miles. Now considering that in most cases a man has to travel some miles to get to a Railway and again more to reach his destination after quitting the rail it would evidently be not worth while for men living above 4 or 5 miles from the line to have recourse to it for so short a distance as 14 miles, the place to be arrived at being on the same side of the line with the point of departure; and therefore I conclude that of such travellers the Railway accommodates only those few of the lower classes who live within 3 or 4 miles of it.

47. In the 21st para: Mr. Fletcher gives his opinion regarding the Indian Tariff that the very low rate of 3d Class has prevented the development of the 1st and 2d Classes.

48. Our Railways are intended not to develop this or that class of customers, but to accommodate each class with the means of transport suited to their requirements and means.

49. To talk of developing a first Class seems to me, when we look at the numerical strength of our first and second classes, to be taking too narrow a view of a great subject affecting millions. Moreover I cannot conceive where we can look for any warrant for the expectation that raising the charge in a lower class will drive men out of it into a higher. No. If we raise our lowest charge we drive thousands off the rail altogether, but none into a higher Class. We can only drive people into a higher Class by the abolition of the lower, and then we shall certainly not gain so much by the few added to the higher class, as we shall lose by the many driven off the line altogether.

50. In the same para: Mr. Fletcher speaks in terms of disapproval of the strong temptation which cheap transport offers and to which some men will yield, deserting the first Class and availing themselves of the 3d Class Carriages.

51. Are the Railway to give us that which we want or that which the Directors choose that we shall take? If the charge of the 3d Class is calculated on right principles and yields a fair profit, what is it to the Directors whether it is paid by a man in a fustian jacket or one in a superfine coat?

52. I have noticed these several passages in Mr. Fletcher's report briefly, but the general principles involved in these statements and reasonings require to be treated more at length.

53. My opinion is that the traffic of the Railways in England is conducted, as far as the tariff is concerned, either on no fixed principles whatever, or on principles which are wholly unsound.

54. This is an opinion which I should hesitate to give, notwithstanding that it is a subject which any one may study and upon which there are certain broad principles to guide him in forming a judgment without the necessity of ever keeping traffic accounts himself; it is my opinion nevertheless that I should hesitate to give, did it not appear to be the common opinion at home, and did it not appear further to me that however active, honest and energetic the Directors and Managers may be, there is in the position and tenure of Railway property in England that which renders good management almost unattainable.

55. The first question that arises is—What is a Railway or system of Railway? What its character? Its uses?

56. It is an immense machine provided at a great outlay of money, involving a prodigious investment of Capital for a great national purpose, nothing less than to provide the whole people with the means of transport for their persons and goods.

57. Does it possess the capacity for the performance of this great national work? Is it worthy of being classed with other great national institutions, as for example, the Post Office? We may safely pronounce that it is, for these reasons:—

58. It is the best instrument yet found for effecting the object required and the more work it has to do, the cheaper it does it.

59. If then it be considered a great national work having a duty to perform to and for the whole nation, for whose benefit are its operations to be chiefly conducted in the first place, and in the second to whom should it look for patronage and profit, to the few or to the many? To the small number of rich, or the multitude of poor?

60. Putting out of sight at present that which Government owes to the people in directing the operations of the Railways for their benefit, let us consider only the profits likely to arise to the Railway by the adoption of the one principle or the other.

61. We need not to look far for evidence of the fact that in all cases, and under all circumstances, wherein we have to do with a whole people, it is from the masses of people that we get masses of money; that it is the sale and consumption of articles brought within reach of the common people that realizes on the aggregate the highest amount of profit, and it is from this cause, viz., that the number of customers increases, as we descend in the scale of rank and wealth, in a much higher ratio than the consumption of individuals increases as we ascend.

62. The Railway is in the position of a vast establishment possessed of an unlimited amount of power and prepared to furnish the people of the country with one single article—transport.

63. If on framing our charges or organizing a perfect system of traffic we would begin at the right end—we must begin here with the cost of the staple, so to speak. The Classification of travellers is merely a refinement upon this; an arrangement by which travellers are made to pay for something provided for them beyond the mere transport, and we shall find not only that the number of people availing themselves of the simple article will greatly exceed that of the higher classes, but also that the aggregate profits in the former case greatly exceed that of the latter.

64. It would appear presumptuous in me to call the attention of Government to this well established principle were it not that, though readily acknowledged by the greater portion of Society, acted upon in the Post Office Department, seen in the national system of Taxation, it appears to have been utterly ignored in the management of Railways.

65. In the Post Office we see an enormous increase since the general reduction of postage in 1839-40, in the quantity of work done, while the net revenue has by a steady advance already attained nearly to the amount realized before that reduction. There can be no doubt that it will soon surpass it; but the principle for which I mainly contend is illustrated by the ratio of work done and expenditure incurred in the two cases.

66. In 1839—76 millions of letters were carried at a gross charge of £2,450,000, while in 1849—337 millions of letters were delivered at a charge of £2,165,349—the profit to the Department steadily increasing with the number of letters carried.

67. Again the collection of Taxes on Income furnishes us with another striking illustration of the importance of the lower classes, and of the great extent of their contributions to the national Exchequer.

68. M. Farr in his evidence before the Committee of the House of Commons in 1852, on the income and property tax, states that levying the tax upon incomes of £150 and upwards it would include 10,773 persons. Descending to those of £125 per annum it would include 434,829. Descending to income of £100 per annum, it would embrace 577,838. Going on to those of £75 it would include 829,117 persons; and descending still further to income of £50 we should find not less than 1,370,404 persons. That is, there are 3 times the number of people between the incomes of £150 and £50 per annum than there are altogether above the former. It appears that these numbers include only the heads of families. For our present purpose a proportionate number of women and children must be added.

69. The same Gentleman in his evidence records the remarkable fact that whereas by limiting the tax to those enjoying an income of £150 or upwards we get 350,000 persons and £5,621,260 in money: by taking another step and embracing those of £50 we get an additional million of people to our Constituency and £2,400,000 more into the treasury.

70. There is a remarkable table given in the Appendix to the above report shewing the number of persons enjoying incomes £200 and year downwards at intervals of £5. The Statement shews that while as income decreases the number of holders increase and in a higher ratio, in as much as the aggregate income of each class increases as we go lower down the scale.

71. I have made these few quotations to shew the immense importance of sweeping into any great national manufactory, the custom of these large masses of people.

72. The above statements do not lay claim to perfect accuracy, but they are evidently given as the result of much study and consideration, as well as of official experience and investigation.

73. Would it not appear an unwise policy for Directors of Railways to talk of developing their higher classes, while every farthing advance in the charges blots out at once whole Classes consisting of hundreds of thousands? For it must be borne in mind that the slightest change in our tariff, especially among the lower classes, affects the people not by individuals but by these large classes; and a stroke of the pen raising the charge of the lower class with a view to driving some of them out of the upper, may close the Railway to a million of Customers.

74. I have said that I consider the traffic operations of the English Railways to be conducted either upon no fixed principles or upon such as are wholly unsound. What are the results? How are these questions treated? We have to discuss the propriety of this or that charge for 1st, 2d and 3d Classes. These Classes are distinguished by the comfort and speed with which they travel. Do the Directors and Managers begin their deliberations by determining what the transport of the individual members of these several classes cost? What the share of Waggon and the movement at 15 miles the hour to the 3d Class. What the more comfortable carriage and high speed for the second. What the cushion and blinds, and glass and additional elbow room to the first? They have been at work upwards of 20 years in England and I have never seen any attempt at a solution of these questions.

75. Then again what must be thought of the principles upon which these gigantic commercial undertakings are conducted when efforts are made to compel men to take—it is considered a grievance if a man does not take—a large carriage with soft cushion at 3d. a mile, instead of a hard bench and a canvas blind at a penny! Was ever such a complaint heard of before from a Manufacturer or dealer?

76. What should you say of the wisdom of a Board of Directors of an establishment on a gigantic scale intended to supply the nation with food, if they were to complain at the richest man asking for a crust of bread, and determine as a preventive against such an enormity to discontinue the supply of bread altogether, or to price it so high as to exclude 19 millions of people from its purchase, while they employed machinery sufficient for the whole nation in the preparation of the more refined description of food for a few hundred thousand people? Yet this is precisely what is done by Managers of Railways when they raise the charge in the lower class, with a view to compensate for a few of the rich travelling with the poor.

77. And what is the actual result on the English lines? Mr. Fletcher says that on the Great Southern and Western (Ireland) the 3d Class are to the 1st and 2d together as $1\frac{1}{2}$ to 1, that is nearly equal. Now the question is, what class or classes of people may we reasonably suppose make up this 1st and 2d Class?

78. We hear of complaints that men of independent means sometimes condescend to the 3d Class, and I do not think it likely that any of what are called the poorer classes ever enter either of the other two.

79. Assuming the above to be the ratio generally in England, and Dr. Lardner's Statements make it appear to be so, and that all men having above £100 a year, with their families take to these classes, they will represent about a million persons in Great Britain, leaving 19 millions to be represented by the 3d Class. Where are they? for the number carried by the 3d Class are in fact very nearly equal to those carried in the other two.

80. It seems to me perfectly clear that the Railways in England have barely touched the mass of the people and that by the high rate of charge, thus excluding multitudes, the proprietors are deprived of their best and by far the most profitable market. I will not venture to assert that the travellers in these two classes would bear a direct proportion to their numerical strength; but I think we may fairly conclude that out of 19 millions poor there would be, if the charge were within their means, more travellers booked than from among one million of the higher classes.

81. It may be well here to mention that there are limits at both ends to the charges which can with propriety be made for a passenger by a Railway. The highest is to be found in the willingness of men to pay for transport with the utmost speed and comfort—the lowest on the actual expenditure due to the movement of the individual, the number of travellers society is capable of furnishing, and the number of such individuals which the Railway is capable of carrying, by which number the share of general charges due to each individual is regulated.

82. The former limit, the maximum, has I believe been already found. We may be pretty sure we have found it when the number of travellers by the higher class falls off or even remains stationary. The higher classes of society have then got as much of speed and comfort as they require at that price. The lower limit has never yet been reached.

83. The lowest charge in England by regular train is about one penny a mile, sometimes a little less, and we have seen the number of the lower classes carried at this rate is small. It must ever be remembered that the cost of each individual's transport varies inversely with the number carried; while the number carried varies inversely with the charge. The higher the charge therefore the greater the cost in each case.

84. M. Belpaire after an admirable analysis of the actual working expenditure on the Belgian Railways shews, that of the total cost of moving a 3d Class passenger a mile according to their experience, viz. $\frac{1}{3}$

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of a penny, only the $\frac{1}{200}$ part of a penny is actually and invariably due to the individual

himself, that the whole of the remainder is susceptible of reduction in proportion as the number of individuals carried increases.

85. The great object therefore in all Railway management, as in that of all large and powerful factories, is to get as much work as possible to do.

86. This brings me to the question of management. M Belpaire concludes his 17th chapter, on the application of the foregoing principles to the establishment of a good system of management, by laying down the following general rules:—

1st. "That we should encourage as much as possible full loads for our engines and carriages.

2ndly. "That we should encourage passengers making long journeys."

And these secondary rules,

"That we should make our engines and carriages go over as much ground as possible daily." And

Lastly. "Keep them standing as little time as possible." Tried by this test how does the management in England appear as reported by Lardner?

87. The writer complains as usual of the want of complete returns and of the necessarily imperfect character of the results; but gives the following as an approximation to the real facts.

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88. On the London and North Western line during the year in question (1849) the average number of carriages 1st, 2d, and 3d Class attached to an engine were 4.17 while the average number of passengers per train was under 50.

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89. Four carriages and 50 people thus continually carried about by a Machine built and maintained and fed and driven at a large cost, but capable of carrying at a moderate estimate 40 or 50 carriages and 12 or 1500 people. Is this good management?

90. The published accounts of English Railways exhibit to the public and the shareholders with careful punctuality the average cost per train per mile. What do we learn from this? The best we can hope is that we learn nothing, for indeed it is directly calculated to mislead.

91. The cheapest work by train mile may be the dearest for the individual man or ton carried; and may therefore yield the least profit.

this is easily shown. The greater portion of the expenses are general expenses. If with a given number, say 500 passengers, we work only one train the general expenses are all thrown on this train, but its cost is divided among 500 passengers. Divide them into 5 trains and the general expenses are distributed over the five, reducing the cost "per train mile," while the total expenses of each train has to be borne by 100 passengers making it fall far heavier on each.

92. As an example of the manner in which good management, as shown in well filled trains, would operate in favor of the people, I will suppose a train leaving Madras for Arcot with 1000 passengers at $1\frac{1}{2}$ pie per mile each, the total receipts would be $1\frac{1}{2} \times 60 \times 1000 = 469$ Rupees. Now the cost per train per mile on 4 light trains a day in Bombay is Rupees 1-8. Let the cost of this heavier train be doubled and the journey would cost $60 \times 3 = 180$ Rupees. The profits upon the one train would be nearly 300 Rupees.

93. In proposing on these principles low charges, we are met on every side by the reply that it won't pay, a reply which is obviously *petitio principii*. One thing I will allow that, whereas, and especially in this country, the receipts from a few of the higher classes will be immediate, the full development of a profitably cheap traffic requires a little time. But can it be otherwise here? Our Railway has to do its work to create new wants, new habits and new demands. With its millions of people to work upon, is it not worth while to wait, as the husbandman waits for his harvest? and can the proprietors of Indian Railways complain while the country gives them 5 per cent from the first deposit of their Capital, and itself bears the necessary temporary loss; while the seed is springing into life, and while the harvest is ripening?

95. In the arrangement which I have proposed for the conveyance of a cheap class on these Railways, I have endeavoured to avoid even the temporary loss by suggesting that while their numbers are few they should go with "goods," and thus render more complete what may already be nearly a full train.

96. I had written thus far when I received by the Mail from England a number of Herepath's Railway Journal for December 15. The first passage I read was a portion of an article on Railway management.

97. It seems sufficiently to the purpose to merit insertion here.

"The most important duty of Railway Directors concerning the beneficial working of Railways is, we have reason to believe, in most

cases entirely neglected—namely, apportioning the train service to the public requirements. The public do not want trains they do not use—what benefit is it to the public to run a host of trains every day which do not carry more than one or two passengers per train? It is evidently no loss to the public to be without such trains. If the public do not use a train, the public cannot regret its discontinuance. What do directors know about the earnings of each of the trains on their line; and how can they determine whether a train should be continued or discontinued without such essential knowledge? Is it difficult of attainment? Not at all. Probably few Officers would be pleased to have to furnish such returns, because in the first place they would lead to many alterations, and in the second place they would give some trouble. The earnings of a train being known, the expenses can be easily estimated. The per centage of working expenses to receipts may be vastly enhanced by running more trains than the traffic needs, but the expenses per mile of running a train empty or full does not vary much."

98. After the above statements and arguments, I need hardly observe that I consider the charge proposed by Mr. Fletcher for his lowest class as most injudicious and utterly prohibitory, as concerns $\frac{1}{2}$ of the people.

99. The principle upon which such scales are framed and advocated, viz. that of getting larger profits by larger charges appears to me utterly unsound. The great wholesale and profitable business of the Railway is to move the masses. The arrangements for the higher classes are made merely to meet the artificial wants and the more refined habits of the few—a sound healthy operation of a railway system will be found in the large development of traffic among the common people. From the surface of the multitude whose wants are thus met, and whose advancement in wealth and prosperity is thus surely promoted, numbers will be continually thrown off to fill the higher classes.

100. To raise our lower fares beyond that which the great mass of the people can afford, is thus to cut off our only sure source of supply, the immense nursery from whence our 2d and 1st Classes are augmented.

101. The questions that may and will be asked, and those upon which the proper charge for any class mainly depends, are,

1st. Since the policy of the very low charge confessedly depends upon its inducing a great number of people to travel—will Society as now constituted offer that number?

2ndly. Has the Railway capacity for carrying such a number ?

102. To the first I would reply that from what we know of the extent and population of the people of England, from what we have now seen of the masses of people who appear to make little or no use of the Railways, there cannot be a doubt of very large numbers being drawn into them by every fall in the charges. Of India we can speak with less confidence. Nevertheless here also are our Millions of intelligent beings. Here is a multitude of poor bearing even a higher ratio to the rich than they do in England, and here I believe the Railways have the same duty to perform, and an adherence to the same broad and liberal principles will I am satisfied, be found essential to a complete and profitable performance of it.

103. To the second question I reply, that the capacity of a Railway is as far as we have yet proved it, unlimited. At all events that it will carry conveniently hundreds where it now carries tens ; and that under the system of management followed in England it has never been tested.

104. I may here remark that the experiment of lowering fares and offering increased facilities to the lowest class of passengers, tried appears unsuccessfully on the Waterford and Kilkenny line, was, on one occasion only, tried on a larger scale by the authority of Parliament. It was a partial experiment, but as such eminently successful.

105. Having spoken of the obstacles purposely placed in the way of the labouring classes prior to 1845, Dr. Lardner states that the attention of the Legislature was called to the subject, and an Act passed with a view to secure to the poor classes the means of travelling by Railway at moderate fares.

106. The main features of the Act are then detailed—there is one train a day at least, the charge not more than one penny a mile—at a speed 12 miles an hour including stoppages. This is the Parliamentary train. It involved an actual reduction of charge to a large body of travellers, the nominal charge being reduced and the amount of comfort increased.

107. According to Mr. Fletcher's views such an arrangement would have been attended with ruinous consequences interfering with the development of the 1st and 2nd Classes. But what are the result

108. The total receipts before the change were for the year ending June 30, 1844 :

1st Class.....	£ 1,499,688
2d „	„ 1,436,537
3d „	„ 503,069

The same period ending 30th June 1845 :

1st Class.....	£ 1,610,805
2d „	„ 1,683,633
3d „	„ 681,903

109. After the Act for the 12 months ending 30th June 1846 :

1st Class.....	£ 1,691,724
2d „	„ 1,967,773
3d „	„ 1,665,719

The number of the 3d Class carried were greatly increased from 13,481,266 during the year ending June 1845 to 19,359,320 during that ending June 1846, and to 29,083,782 during that ending 30th June 1848. The first and second classes also increasing steadily though not so rapidly as the 3d.

110. It is quite clear that a change in this direction was not likely to be made at all but for Parliamentary interference ; and this leads me to allude briefly to the opinion which I have given above, viz. that there is that, in the position and tenure of Railway property in England that renders good management almost unattainable.

111. Railways everywhere, pre-eminently in India, are progressive institutions exhibiting necessarily a constant increase in themselves and in the scale of their operations.

112. Like all commercial undertakings of a similar nature they involve, in the ordinary course of judicious management and sound speculation, frequent sinking of Capital with a view to ultimate though not immediate increase of profit.

113. The Railways are however as commercial undertakings peculiarly situated. Capital invested in them is held by a large number of proprietors as floating transferable investments. They take up their position with other securities in the market—like others they are held by men of various classes and for various purposes. To some they constitute their entire income, to others a temporary convenience, to others a speculation looking for a rise, to very few is the thought of even temporary depression in the market value endurable.

of proprietors—such conflicting opinions, agreeing only in a dislike of such depression of value, it seems impossible that any director can venture even to propose measures however sound in theory, or hopeful in practice, that are calculated to effect present reduction of dividend, and consequent fall in the value of shares; and what undertaking commercial or manufacturing can succeed without such occasional sacrifice?

115. More than all, in a field like this where the Railways are laid down among a people low in the scale of wealth and civilization, where every additional 100 miles of rail opens up a country; and a people that have never yet enjoyed the advantage even of good common roads and among whom travelling has been hitherto unknown save as a matter of disagreeable necessity, what would be the consequence if our arrangements were made solely with a view to reaping all the present profits we can, rather than to the creation of a future harvest?

116. It is this constant effort to bolster up the present dividends in England, that has led to so much mismanagement and real injury to railway property; by preventing the due extension of their field of usefulness and profit, and by tempting the Managers to meet their revenue expenditure too often out of Capital.

117. There can be no doubt that if the principles which I have been endeavouring to establish were carried out throughout the Railways in England—if the penny charge were reduced to a half-penny—the very success of the measure, the creation of a new and large class of passengers, would necessitate increase of stock and of accommodation of various kinds, and until the new class thus touched for the first time began to feel and take advantage of the change there would be a depression in the revenue.

118. A single Capitalist, strong in the conviction of the soundness of his principles would not heed this; but to a multitude of small shareholders holding shares for immediate use—or dependent upon them for their daily bread—the change though temporary would be intolerable.

119. To expect sound management under such circumstances would be unreasonable—we might as well look to the holders of 3 per cent stock to determine the financial measures of the State.

120. I trust therefore that a system which has grown up under circumstances so unfavourable to sound management will not be hastily applied in this country, where happily we are in a position to consider the subject dispassionately, and to determine it with reference to the best interests of the proprietors as well as to the people of India.

121. It seems to be the more necessary that Government should cause the subject to be well weighed, and the scale of charges established if possible upon those only sound principles which are found based upon great invariable truths, because in the Contract with the Railway Company it seems that when once the Tariff is fixed no change

Clause 8 seems to be open to this construction.

can be authoritatively made unless the profits exceed 10 per cent.

122. Now if the above arguments have any force in them the scale proposed by the Railway Managers—excluding the masses of the people—is such as to render it very improbable that the profits will ever reach that amount, while the sentiments of those gentlemen tend rather in the direction of continually raising the charges with a view to an increase of profits. We should have little hope therefore of ever seeing them lowered or altered. A scale has been sanctioned by the Supreme Government and I trust will be adhered to until the experiment has had full time.

123. In the meantime I trust that a proper and economical system of management will be required, that the Railway authorities will be not allowed to draw hasty conclusions from immediate results, but that the experiment may be fairly and completely carried out, and on no account abandoned or condemned, so long as the amount of traffic and aggregate profits continue to increase, and the Railway is not saturated with work.

124. In the report now referred to Mr. Fletcher has proposed to commence operation on the Madras line by running two trains daily each way. I do not approve of this, but shall submit this question to Government hereafter.

125. I shall conclude with some brief observations on the Goods Tariff to which I believe the same principles to apply. The scale proposed by the Agent in his Report, No. 137, of the 2d May 1855, has been pronounced by the Government of India, as rather too much subdivided and generally too high, and the adoption of the Bengal Goods Tariff is ordered as being a very proper one for a commencement. Mr. Fletcher's proposed charges differ from both, being somewhat lower in the highest and higher in the lowest class of Goods, than in the Tariff now ordered.

126. With reference to a proposal made in my Report, No. 91, dated 27th June 1855, that the charge for Goods per ton mile should be 8 pies

(one penny) the only distinction made being that between "measurement" goods and dead weight—the Government of India has been pleased to observe that it has nothing to recommend it but its simplicity.

127. I beg permission to explain that I recommended that measure to the approval of His Lordship in Council as possessing in my opinion two very great advantages:—*First*, as calculated greatly to increase both the business and the profits of the Railway, as well as to extend the bounds of its usefulness. *Secondly*. Its simplicity, as greatly tending to promote economy and dispatch in the transaction of business.

128. Considering the habits and condition of the people of this part of India as well as the description of subordinate agency which will be necessarily employed in the management of the traffic, it does appear to me that little good and much evil will result from the adoption of a complicated Tariff. A sort of *ad valorem* charge for the carriage of great variety of articles that we know are consumed in very small quantities in this part of India, and the very names and uses of many of which are wholly unknown to the people of India. The principal effect of such a system here will be to promote extortion or collusion among the subordinate servants of the Company.

129. The charges now sanctioned by the Government of India for what are called 2d and 3d Class Goods are one anna and 5 p (rather over 2 pence) and 2 annas and 2 p (3½ pence) respectively per ton mile. In the former case the charge is about the same as that by common cart on good road now. In the latter it is considerably higher.

130. In these two Classes are found all our chief articles of produce and traffic at the present day, Charcoal, Cotton, Firewood, Gram, Horn and Hides, Salt, Straw, Sugar, Timber, Tobacco, &c. According to the scheme now ordered for adoption these and many such articles are to be conveyed no cheaper mile for mile than they can be carried on the common highway, quicker doubtless and in most cases safer. But is this all we want? Will this "develop the resources" of the country chiefly—agricultural produce? Will this provide the Railway with full work or give an attractive influence on the adjacent Districts? I fear not.

131. That which may be exactly suited to the Bengal Railway and its circumstances does not necessarily suit us here. In Bengal the Rail runs away hundreds of miles up a line of large existing traffic following the course of the great river and picking up from the great

cities long established on its banks the accumulated traffic of the whole valley of the Ganges. Here we stretch across the open plain. The Railway has to look to itself and its own attraction to draw traffic from the neighbouring districts, it can only do this by offering cheap as well as quick and safe transport for men and goods. Given a certain charge on the Railway, the extent of country on each side likely to supply it with work is easily shewn. If the charge on the rail be mile for mile, half that on the road, it will be well worth a man's while to travel 30 miles to the rail, and 40 on it, rather than 50 by the high road. But if the charge by rail is the same as by the road, how far out of his way will he go to purchase the advantage of sending his raw produce a few days earlier to a distant market! a good deal has been said about salt, but these charges will not cheapen the salt to the consumer in the interior one farthing.

132. As an illustration, our present railway runs by Salem, 200 miles from Madras. From Trichinopoly to Salem by common road is 85 miles, by the same, direct to Madras is 200 miles. Had there been a low charge, as 8 pies (one penny) per ton on the rail, that on the high road being 1½ Anna,—a merchant at Trichinopoly would not have hesitated to send goods, destined for Madras, to Salem where they would take the rail. He will not do so now, and in fact the influence of the Railway must be confined for the same reasons within very narrow limits.

133. If we had nothing to do but to compete with a road in carrying a large and sufficient traffic, already existing on that line; it might be all very well to keep on charging the same as those on the road, and do the work better, but we have much more to do. We have to increase that traffic in order to make the Rail pay, and we have to develop the resources of the country by cheapening and facilitating to the utmost the carriage of its cheap and bulky produce.

134. I greatly fear that these charges will fail to effect either of these objects—that their effect will be to keep down to a very great extent the business of the Railway as well as its profits; to disappoint public expectation, and seriously to diminish the usefulness of the work.

135. I am not aware that in any country where Railroads have been yet established the charge mile for mile has been kept up to, or raised above, that previously charged on the high ways. I stated in a former report what according to Lardner was the average charge in England, and shall only now add the following extract from American reports.

See my Report to Government, No. 43, dated 25th November 1853.

No. 91, dated 27th June 1855.

"The average expense of operating the Central lines of roads in 1851 was 8½ mills (3¼ pices) per ton mile and of the New York and Erie and the northern roads was 7 mills (2¾ pices) per ton mile."

(Report on the Canal and New York for 1852, page 58.)

"The charge for the transportation of all freight on the Central Railroad averages 3 cents and 4 mills (one Anna and 1½ pie) and on New York and Erie 2 cents and 4 mills (9½ pices) per ton mile." (Ditto for 1854, page 28.)

136. In the consideration of this important question, which I regret to find I am compelled to treat at such inconvenient length, there are two or three points we must always keep in mind.

1st. That no Railway has ever yet, that we are aware of, been saturated with work. There is frequently an apparent press of business on English lines, passenger trains following each other in quick succession, in so much as to compel heavy Goods trains to travel at an expensive rate of speed. But these passenger trains are seldom half full and the convenience of the public is consulted by frequent trains at a cost that the public would be very sorry to be called upon to pay.

2ndly. Until a Railway is fully, as well as judiciously and economically worked, the lowest limit of cost at which man or ton can be carried has not been reached.

3dly. The sure and inevitable effects of reducing the charges on a Railway are three fold, viz. to induce those who have hitherto made use of it to extend the distance for which they use it;—2dly, to draw on to it additional classes of society; *thirdly*, to bring within its influence additional tracts of country; and as it has been shewn that equal difference in worldly means embrace larger masses of people as we descend in the scale of society, so a very little reflexion shews that every additional mile given to the radius of a circle, the centre of which is a Railway station adds to that circle a greater extent of land, and larger number of people as we recede from the centre.

T. T. PEARS,

Consulting Engineer for Railways

Madras, 19th February 1856.

FINANCIAL RAILWAY ARCHIVES
No. 111.

Extract from the Minutes of Consultation dated 22d April 1856.

Read the following Observations of the Consulting Engineer on a letter from the Agent of the Railway Company. 15835

(Here enter 19th February 1856, No. 24.)

In their letter of the 28th November last, the Government of India passed orders upon the scale of Fares and Rates for the Madras Railway, submitted to them under date 10th August 1855.

2. For passenger Fares they approved the scale proposed by Col. Pears, which, they observed, was the same as that for the East Indian Railway except that his 3d Class Fare was higher by a third.

Colonel Pears' scale is

X 415.20
MS7

	Passenger per mile.	
	A.	P.
1st Class.....	1	6
2d do	0	9
3d do	0	4 (Bengal 3 pice.)

3. They also approved Colonel Pears' proposition for a 4th or slow train running with the goods trains, or at the goods trains pace and at 1½ pie per passenger per mile, but did not agree with him that the payments should be in whole annas. They desired that "the fare table should be calculated to the nearest pice, a small and uniform terminal charge being added.

4. For goods, the Bengal goods Tariff was to be adopted as a very proper one for a commencement, though it might hereafter be found profitable and therefore expedient to lower the first Class from ½ to ¼ pie per maund per mile. The Tariff submitted by the Madras Railway Agent was thought too much subdivided and generally too high and Colonel Pears' proposal to fix the rate for all goods at 8 Pice per ton per mile was not approved.

5. For Carriages, Dogs and Live Stock, it was observed that the rates that had been proposed by the Madras Agent were identical with those in force for Bengal, but it was intimated that these rates were under revision in Bengal, and a detail of the proposed rates was annexed.

6. The parcel Tariff proposed by the Madras Railway Agent was approved, that proposed for the East Indian Railway was also given.

7. The above letter from the Government of India was furnished to the Consulting Engineer, and he was requested, (Extract Minutes of Consultation, 11th January 1856,) to call upon the Railway Agent to submit a revised table of Fares for passengers, goods, horses, dogs and parcels, according to the rates now sanctioned by the Government of India, and also, after communication with the Traffic Manager, to submit a set of Rules and Regulations.

8. The Consulting Engineer now forwards a Report of the Traffic Manager received through the Railway Agent and concurred in by that Officer. The Traffic Manager objects to the Passenger fares recommended by Colonel Pears and sanctioned by the Supreme Government, as too low, and submits a scale of his own, which agrees with that originally proposed by the Railway Agent for the two first classes, but is higher for the third. The three scales are per mile,

	Colonel Pears sanctioned by the Govt. of India.		Railway Agent.		Traffic Manager.	
	As.	P.	As.	P.	As.	P.
1st Class.....	1	6	2	...	2	...
2d do.	..	9	1	...	1	...
3d do.	...	4	...	4	...	6

9. To the fourth or slow Class, he objects altogether, and enters upon an elaborate discussion of the evils of low fares..

10. For parcels, dogs, horses and carriages Mr. Fletcher has submitted rates of his own; so also for cattle, sheep, goats and pigs. These, he states, to be lower than those charged on the other Indian Lines.

11. For Goods he proposes four classes.

	Per Ton.	Per Maund.
	D.	
The first class per mile	1½	.44 pice.
Second do.	2	.58
Third do.	2½	.73
Fourth do.	3	.88

Per Maund per Mile.	Bengal Tariff. Pic.
1st Class.....	¼ or .33
2d do.	⅔ or .66
2d do.	1 or 1.
No fourth class.	

This Tariff differs somewhat from the Bengal goods Tariff which has been ordered to be adopted as being very proper for a commencement, being somewhat lower in the highest, and higher in the lowest class of goods.

12. All the Tables drawn up by the Traffic Manager are framed according to his own views of what the rates should be.

13. It is to be observed that the Passengers fares and the goods and parcels tariff have been decided already by the Government of India, who have also determined that there *shall be* a slow or goods train on the rate suggested by Colonel Pears. The only rates that they have left open to consideration are those for Carriages, Horses, Dogs, and Live Stock.

14. The Right Honorable the Governor in Council must remark that it was not competent to the Railway Authorities to set aside the rates which had been sanctioned by the Supreme Government and to substitute tables framed after rates of their own devising. Their tables should have been drawn up according to the rates which had been sanctioned. They might, in submitting these tables, have accompanied them with their own remarks, and it would also have been open to them to append a set of tables for comparison framed according to their own views. But a set of tables, after the rates that had been approved by the Government of India, should, under any circumstances, have been given.

15. The Right Honorable the Governor in Council apprehends that the Supreme Government would not be disposed to reconsider their opinions in regard to Passenger fares or the slow Class train. This Government certainly could not desire them to do so, nor do they see the least occasion to re-open this part of the question. The Governor in Council now requests that the Consulting Engineer will call upon the Railway Agent to comply with the requisition made in Extract Minutes of Consultation, 11th January 1856, by submitting a set of tables which, as regards passengers, fares, (including the slow train,) goods Tariff, and parcel Tariff, shall be framed precisely on the rates for passengers, goods and parcels which have been already sanctioned by the Government of India.

16. The rates for carriages, horses, dogs and live-stock being not yet settled, the Railway Agent may, if he sees fit, adopt those recommended by Mr. Fletcher. The Consulting Engineer, in laying them before Government, will make upon them any comment that may seem to him to be called for.

17. Meanwhile, the Right Honorable the Governor in Council resolves to forward these present papers to the Government of India for their information. In so doing this Government will earnestly solicit their attention to the remarks offered by Colonel Pears in the conclud-

ing paras : of his very able Memo. Reluctant as they must be again to urge upon the Supreme Government the consideration of a question on which they may be deemed to have expressed a deliberate opinion, they feel it, nevertheless, incumbent upon them to entreat especial regard to the arguments advanced by the Consulting Engineer in paras : 125 *ad finem* of his paper on the proposed goods tariff. The circumstance, that rates once fixed cannot apparently be changed authoritatively, except on a contingency not likely for a long time to be realized, renders caution in their original determination doubly needful and the reasons adduced

by Colonel Pears in favor of his low and uniform Tariff, above one higher and more complicated, are so cogent and so clearly stated, that it is trusted they may yet commend themselves to the judgment of the Supreme Government.

(A true Extract,)

T. PYCROFT,

Chief Secretary to Government.

FINANCIAL RAILWAY DEPARTMENT.

No. 119.

TO LIEUTENANT COLONEL W. E. BAKER,

Secretary to the Government of India.

SIR,

I am directed by the Right Honorable the Governor in Council to acknowledge the receipt of your letter of the 28th November last, on the subject of the proposed fares and rates for the Madras Railway,

2. On receipt of your letter, it was communicated, through the Consulting Engineer, to the Railway Agent, who was directed to submit a table of Fares according to the rates that had been sanctioned by the Supreme Government.

3. I am now desired to forward, for the information of the Government of India, the reply of the Railway Agent, the observation thereon of the Consulting Engineer and the orders that have been passed by this Government.

4. It seems unnecessary to occupy the time of the Supreme Government by a detailed recapitulation of, or commentary on, these papers. It may suffice to state that the Traffic Manager, with the concurrence of the Railway Agent, in place of drawing up tables on the rates approved by the Government of India, has submitted tables of his own, framed on rates differing from, and in some cases in excess of, those already sanctioned by the Supreme Government, and that the views of the Traffic Manager and Agent have not met the approval of this Government who have called upon them for revised tables prepared in strict conformity with their former instructions.

5. The Right Honorable the Governor in Council would not have troubled the Supreme Government with this correspondence, and would have deferred addressing them on the subject until he could have submitted the revised table for which he has called, were it not that he feels anxious at once to lay before them the highly important observations offered by the Consulting Engineer in his masterly paper.

6. Much of this Memo : is directed to the refutation of the arguments employed by the Traffic Manager in favor of high fares, and against the introduction of a slow or goods pace Train. This part coinciding as it does with principles already approved by the Government of India needs no remark—that to which this Government would desire to bespeak especial attention is the concluding paras : 125 *ad finem*, on the subject of the proposed goods Tariff.

7. It has been pointed out by Colonel Pears that it seems very doubtful whether when the Tariff of charges has once been fixed any change can be authoritatively made in it, except on a contingency little likely to be realized. This circumstance and the great importance of the question must be the apology of this Government for recurring to a subject on which the Supreme authority have already given a deliberate opinion. They would solicit particular attention to the facts stated by Colonel Pears in paras : 129 and 130, that the charges to which all the chief articles of produce and traffic in this Presidency would be subjected by the proposed goods Tariff are as high, and in some cases much higher, than those for which they can now be carried by common cart on a good road. The conclusion which Colonel Pears has drawn from these facts is, in the opinion of the Government, so inevitable that, reluctant as they are to re-agitate the question, they must venture to solicit its reconsideration and to express their hope that the low and uniform Tariff for goods advocated by Colonel Pears may yet recommend itself to the approval of the Supreme Government as better adapted to the resources of

his Presidency and to the condition of its people, than the more complicated and higher Tariff which, doubtless, for very sufficient reasons, has been introduced in Bengal.

8. Adverting to the approaching opening of the line, I have to elicit a reply to this communication at the earliest convenience of the Government of India.

I have &c.,

T. PYCROFT,

Chief Secretary to Government.

Fort St. George, 22d April 1856.

CHAMBER OF COMMERCE,
MADRAS, 2d APRIL 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort St. George.

SIR,

The Chamber of Commerce have been given to understand that Government have under consideration a proposed Tariff of charges for traffic by the Madras Railway, and they are anxious to have the opportunity of perusing the same and of being allowed to offer such remarks or suggestions as may appear desirable before it is finally adopted. I have the honor, therefore, by their desire to request you will be pleased to move His Lordship in Council to favor the Chamber with a copy of the said Tariff.

I have &c.,

J OUCHTERLONY,

Chairman.

No. 118.

The Chamber of Commerce are informed that the Tariff of charges for traffic by the Madras Railway is at present the subject of correspondence between the Madras Government and the Government of India. When the proposed Tariff is received from that Authority it shall be communicated to the Chamber.

Fort St. George, 28th April 1856.

MADRAS RAILWAY,
28TH APRIL 1856.

No. 238.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO MAJOR J. H. BELL,

In charge of the Office of Consulting Engineer for Railways.

SIR,

1. I have the honor to acknowledge the receipt of Minutes of Consultation, No. 111, dated 22d ultimo, in which the Government have been pleased to remark in making their observations upon the tables of Rates and Fares submitted by me on the 5th of January, that it was not competent to the Railway authorities to set aside the rates which had been sanctioned by the Supreme Government and to substitute Tables framed after their own devising.

2. I beg respectfully to observe that the Government are under a misapprehension in this case by confusing the tables which have at various times been submitted.

3. On the 2d May 1855, I transmitted to your Office a table of rates and fares (No. 1) prepared by myself as called for by you in the months of March and April of the same year, expressing at the time my regret that the consideration of the question had not been deferred until the arrival of the Traffic Manager in India.

4. On the 5th January 1856, I transmitted to your Office a table of rates and fares (No. 2) prepared by the Traffic Manager in accordance with his views as directed in order of the Government, No. 193, dated 10th August, 1855, Para : 12.

5. And here, I would beg to state that the rates and fares remarked on by the Government in the Extract from Minutes of Consultation now received are those (No. 2) last named.

6. It was not until 20 days subsequently to the transmission of Mr. Fletcher's table of rates and fares (No. 2) that the order of Government, No. 12, dated the 11th January, was received by me.

7. The table of rates and fares based upon the orders therein given, you are aware was forwarded to you on the 15th ultimo, for transmission to Government.

8. I request that you will do me the favor to lay before the Government this letter with a view to the removal of the misapprehension

FINANCIAL (RAILWAY) DEPARTMENT.
No. 141.

TO THE SECRETARY TO THE GOVERNMENT OF INDIA.
IR.

In continuation of my letter of the 22nd ultimo, No. 119, I am directed by the Right Honorable the Governor in Council to transmit for the information of the Government of India, copy of one from the Agent and Manager of the Railway Company, with the observations of the Officer in charge of the Consulting Engineer's Office, submitting explanation in reference to that part of the Extract Minutes of Consultation, 22nd April last, No. 111, in which the Government had remarked regarding the tables of rates and fares drawn up by Mr. Fletcher, the Traffic Manager, that it was not competent to the Railway Authorities to set aside the rates which had been sanctioned by the Supreme Government and to substitute Tables framed after their own devising.

Para 12. Colonel Pears proposes at the consideration of the tables forwarded by the Agent for orders of Government should be postponed until the arrival of the Traffic Manager in this Country, whose experience in these matters would prove great assistance in the discussion of the subject.

2. The Railway Agent and Manager represents that this Table was prepared by the Traffic Manager in accordance with his views as directed in the Extract Minutes of Consultation, No 193, dated 10th August 1855, Para: 12, which is quoted in the margin.

3. This order, it should be observed, applies only to "Rules" for goods and passengers Traffic. The rates and fares had in the Proceedings referred to been disposed of by this Government as far as it was competent to them so to do, and the final settlement of the question had been referred to the Government of India.

4. The orders of the 10th August last therefore gave no opening for the submission of this second set of tables of rates and fares. It now however appears that that set was sent in by the Railway Agent and Manager some days before he was in possession of the Orders of the Supreme Government of the 28th November 1855, and the Railway Officials consequently stand fully exonerated from all imputation of having wilfully set aside those orders.

5. This explanation has been submitted to the Government of India at the request of the Railway Agent and Manager.

I have &c.,

T. PYCROFT,

Chief Secretary to Government.

Fort Saint George, 14th May 1856.

No. 2322.

FROM LIEUTENANT COLONEL W. E. BAKER,

Secretary to the Government of India.

To T. PYCROFT, Esq.,

Chief Secretary to Government, Fort Saint George.

Dated the 23d May 1856.

Public Works Department. } SIR,
Railway.

I am directed to acknowledge the receipt of your letter, No. 119, dated the 22d ultimo, with enclosure on the subject of a proposed scale of Fares and Rates for the Madras Railway, and to state in reply that the Right Honorable the Governor General in Council has perused with the greatest interest the admirable memoir submitted by the Consulting Engineer for Railways at Madras, and is disposed to allow great weight to his arguments supported as they are by the assent of the Government of Fort Saint George.

2. His Lordship in Council considers that Colonel Pears has successfully demonstrated the fallacy of the arguments on which the Officers of the Madras Railway have based their proposals for a high scale of charges for the conveyance of passengers and goods.

3. The Government of India has hitherto desired to establish the lowest Tariff on which a small margin of profit could fairly be expected, and is prepared to support the Government of Madras in following the same principle.

4. The scale of passenger fares may stand as approved by the Supreme Government in my letter, No. 2746, dated the 28th November 1855.

5. In regard to the Goods Tariff two questions are involved in the reference made in your letter under reply.

1st. Whether there shall be a graduated or an uniform goods tariff?

2d. To what point the charge may safely be lowered before the cost of working the traffic has been experimentally ascertained?

6. On the first of these questions the Governor General in Council is unable to modify materially the former decision of the Supreme Government. Neither the cost of conveyance nor the insurance risk are the same on all descriptions of goods; and on this account alone it

ould be unjust to insist on a uniform charge. His Lordship in Council however considers that it is not necessary to have more than three rates for goods.

7. In reference to the second question it is believed that the rate for the lowest class of goods may be fixed somewhat lower than the lowest in Bengal which is $\frac{1}{3}$ of a pie per Maund per mile. The distribution of Goods under the 3 Classes, and the determination of rates for the higher classes, are left to the judgment of the Government of Madras.

8. Adverting to the opinion entertained by the Madras Government that under the Contract between the East India Company, and the Railway Companies the tariff once authoritatively sanctioned cannot be lowered until the net profits amount to 10 per cent per annum on the Capital, I am to observe that the tariff first adopted in Bengal was an experimental one, and was clearly understood to be so both by Government and by the Railway Officers. I am to suggest that a similar course be followed at Madras and that the tariff now to be approved by the Government of Fort St. George be clearly stated to be an experimental one, subject to revision by Government after the expiration of one year. It is supposed that the Madras Railway Company would consent to this understanding, seeing that the alternative would probably be the adoption by Government of a tariff still more opposed to their own views.

I have &c.,

W. E. BAKER, Lieut.-Colonel,
Secretary to the Government of India.

Fort William, the 23d May 1856.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 166.

Extract from the Minutes of Consultation, dated 5th June 1856.

Read the following letter from the Secretary to the Government of India in the Public Works Department, 23d May 1856, No. 2322.

Resolved that copy of the above letter be furnished to the Consulting Engineer for Railways in reference to his memoir of the 19th February last, and through him to the Railway Agent and Manager and that he be requested in communication with the Agent to prepare and submit at his earliest convenience for the consideration of Government, a Good Table of three Classes, the rate for the lowest Class being somewhat lower than the lowest in Bengal.

	Per mile.	
	A.	P.
1st Class.....	1	6
2d Class.....	0	9
3d Class.....	0	4
Besides a slow or goodspace Train.		

2. It will be observed that the scale of Passengers Fares is to stand as sanctioned by the Supreme Government under date 28th November 1855.

3. The rates for Horses, Carriages, Live Stock, &c., have still to be submitted by the Railway authorities.

4. The Supreme Government it is remarked have suggested that the Tariff now to be approved by the Government of Fort Saint George be clearly stated to be an experimental one, subject to revision by Government after the expiration of one year. It is presumed that this arrangement will be acquiesced in by the Railway authorities, and it is observed that a similar course has already been followed in the Bengal line.

T. PYCROFT,

Chief Secretary to Government.

MADRAS RAILWAY COMPANY,
AGENT AND MANAGER'S OFFICE.
15TH MARCH 1856.

No. 148.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.

Consulting Engineer.

SIR,

1. In accordance with the orders of the Government, Extract Minutes of Consultation, No. 12, dated 11th January 1856, communicating a letter from the Secretary to the Government of India, Financial Railway Department, No. 2746, I have the honor to submit a Table of *Fares for Passengers, and *Rates for Goods, together with *Bye Laws proposed to be used for the regulation of the Traffic upon this line of Railway.

2. You will observe that the Passengers' Fares are those adverted to in para: 2 of the order of Government and that

3. The Goods Rates are founded upon the Schedule of Rates actually in force at the present time on the East Indian Railway.

* See Appendix A, C, B.

tunity to the Directors of the Company for their instructions; and requesting finally that the Government may be pleased to allow the subject (respecting the 4th Class passengers) to stand over pending the receipt of those instructions.

In reply, I have to observe, that while the letter now under acknowledgement refers to a late order, the subject of the 4th Class passengers has been for some time under consideration and discussion; that while it appears that by the earliest opportunity after receiving the order of the 11th January you solicited the instructions of your Directors thereon, you in a letter dated the 15th March requested to be informed of the amount proposed for the terminal charge on 4th Class passengers, to enable you to have the fares for this class of passengers prepared; that to my letter pointing out that this terminal charge might with greater propriety be suggested by yourself, No. 180, dated 4th April 1856. I have not been favored with reply and consequently the tables, &c., forwarded with your letter of the 15th March, being still incomplete, have not been submitted to Government.

Under these circumstances, and with further reference to the concluding passage of your letter, No. 238, of the 20th ultimo, now before Government, I would suggest to you the propriety of preparing without delay the table of fares for 4th Class passengers. The orders of the Supreme Government being thus fully complied with, your several letters upon the subject will be laid before this Government, and you are of course at liberty to make such further observations as you may think proper in support of your proposal to suspend a practical carrying out of those orders, until the instructions of your Directors shall have been received.

I have &c.,

T. T. PEARS,

Consulting Engineer for Railways.

Camp Coimbatore, 15th May 1856.

(True Copy.)

T. T. PEARS,

Consulting Engineer for Railways.

MADRAS RAILWAY,
27TH MAY 1856.

No. 323.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer for Railways.

SIR,

No. 111, dated 22d April 1856. In obedience to the orders of Government as per margin and with reference to your letter, No. 229, dated 15th Instant, I have the honor to forward a statement of 4th Class rates with a Terminal charge and annex a copy of a letter, No. 100, dated 26th May, from the Traffic Manager in explanation of the latter.

2. Being given to understand that the subject of the 4th Class Fares has been under the consideration of the Directors of this Company, I request that you will have the goodness to solicit the Government to allow the question of the establishment of a 4th Class Passenger rate to remain in abeyance pending the receipt by me of orders from the Directors of the Company.

3. As stated by me in my letter, No. 244, dated 30th ultimo, I was under the impression that it had never been contemplated by this Company to submit for the approval of the Government a proposition to try the experiment of conveying 4th Class Passengers; consequently in now obeying the orders of the Government, I respectfully beg that this act of mine may not be deemed binding upon the Company nor act prejudicially to such steps as the Board may determine to adopt in reference to this matter.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Madras, 7th June 1856.

Submitted (with Observations) for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort Saint George.

MADRAS RAILWAY,
TRAFFIC DEPARTMENT,
26TH MAY 1856

No. 100.

FROM H. A. FLETCHER, Esq.,

Traffic Manager.

TO MAJOR T. A. JENKINS,

Agent and Manager.

SIR,

I have the honor to acknowledge the receipt of your letter, No. 45, of the 21st Instant, enclosing copies of letters from the Consulting Engineer for Railways, Nos. 180 and 229.

2. In compliance with the instructions of Government conveyed in your letter, I enclose a statement herewith of 4th Class Passengers Fares.

3. You will see that it is computed in accordance with the principle contained in 6th para : of the instructions of the Supreme Government, communicated in Extract Minutes of Consultation, No. 12, of 11th January 1856, to the division of $\frac{1}{8}$ part of a Rupee.

4. I have considered the small Terminal charge adverted to in the letter of the Consulting Engineer, No. 180, paras : 2 and 3, and beg to say that I can scarcely come to a satisfactory conclusion as to what the Terminal charge should be.

5. If we consider the Terminal charge on Goods, as in force upon the East Indian Railway, we find the charge for a minimum weight of 32 maunds is 8 Annas, if a larger quantity, say for instance a Waggon load be conveyed, we should receive a Terminal charge of Rupees 2-15-7, if this be divided over 60 Passengers we should find a Terminal charge equal to nearly 10 Pice for every 60th part of 7 Tons.

6. If any other description of Traffic be analysed, it will be found that the rate far exceeds any charge we could possibly make as a Terminal to bring the 4th Class equal to the rate at which it is carried.

7. Taking all circumstances into consideration however I beg to propose that a Terminal Charge of six (6) pie for each Passenger booked be made, and that no less charge be made than one Anna for any Passenger for any distance.

8. Actuated by a sense of duty I beg to observe that I do not consider it advisable to establish so low a rate as that proposed for 4th Class Passengers, as it will in my opinion be highly detrimental to the other classes, particularly to the 3d, as I think in this Country, where the Natives do not appreciate the value of time, they will generally avail themselves of the lowest rate.

I have &c.,

H. A. FLETCHER,

Traffic Manager.

(True Copy.)

T. A. JENKINS,

Agent and Manager.

MADRAS RAILWAY.

STATEMENT OF FOURTH CLASS PASSENGERS FARES FROM MADRAS.

Distance Miles.	Stations.	Amount.		Terminal charge.		Total charge.	
		Rs.	A P.	A.	P.	Rs.	A P.
3 $\frac{1}{2}$	Perambore.....	...	0 6	...	6	...	1 0
7 $\frac{1}{2}$	Red Hills Road.....	...	1 0	...	6	...	1 6
13.	Avady.....	...	1 9	...	6	...	2 3
18	Tinnanore.....	...	2 3	...	6	...	2 9
26	Trivellore.....	...	3 3	...	6	...	3 9
29 $\frac{1}{2}$	Cudumbatore.....	...	3 9	...	6	...	4 3
36 $\frac{1}{4}$	Chinnamapet.....	...	4 6	...	6	...	5 0
45 $\frac{3}{4}$	Comanypet.....	...	5 9	...	6	...	6 3
56	Sholinghur.....	...	7 0	...	6	...	7 6
65 $\frac{1}{4}$	Arcot.....	...	8 3	...	6	...	8 9

T. A. JENKINS,

Agent and Manager.

No. 108.

On letters (No. 148, 244, and 323) from the Agent and Manager of the Madras Railway Company, dated 15th March, 30th April and 27th May 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

With reference to the order of Government in the Financial (Railway) Department, No. 12, dated the 11th January 1856, the Agent sub-

mits for approval tables of proposed rates for passengers and goods, &c. on the Madras Railway. The Agent's first letter is dated 15th March and the delay in laying these papers before Government has arisen in the first instance, from the papers not including a table for 4th Class passengers, and secondly, from the expectation, that further orders on the subject would be received from the Supreme Government.

2. As the line is not yet ready for opening, and the tables were ordered to be framed according to definite instructions, neither requiring or admitting of any further discussion, no inconvenience appeared likely to result from the delay; and I thought it better to lay the papers in a complete form before Government.

3. The table of fares for passengers as now submitted with that for Parcels, Horses, Carriages, Palankeens and Dogs, is now complete, and has been drawn up in accordance with the order of Government conveyed in Extract above referred to.

In a subsequent order, Government directed that the rates for Carriages, Horses, Dogs and Live Stock being not yet settled, the Railway Agent may if he sees fit adopt those recommended by Mr. Fletcher.

5. The Agent in replying to that order has not suggested any alteration in these respects, and the charges for Carriages, Horses, Palankeens and Dogs are, in the accompanying table, framed in accordance with the Bengal tables, dated 7th December 1855, which were, I believe, not before Government at the date of the above order.*

6. I would now recommend that these tables for passengers 1st, 2d 3d and 4th Class be approved, as also those for Parcels, Horses, Carriages, Palankeens and Dogs; and at the same time that the Agent be informed, that these rates are to be considered experimental for the period of one year from the time of opening; after which they will be subject to revision, should the Government desire it.

7. With regard to the goods, &c. I am now in communication with the Agent on the subject of the order of Government, No. 166, dated 5th June 1856, and hope to be able to submit a revised scale of charges in a few days.

8. It may not be considered necessary that I should say anything more on the subject of the 4th Class passengers alluded to in Major Jenkins' letter, I should only therefore observe briefly that I consider,

in all respects, except the expenses of booking, 4th Class Passengers among the cheapest commodity the railway can carry. It is easier to ensure full vehicles with this than almost any other article of freight. They call for no expenditure of labour in putting or in taking out of carriage. A ton of these will yield, exclusive of terminal charges, about 2 Annas a mile, causing the least possible damage to the rolling Stock—while a ton of coals will yield, according to the tables first proposed only 9 pice a mile, and will necessarily damage the Waggon to some extent.

9. I would therefore remind the Agent that with the cheap and poor Class of passengers the same expensive system of booking is neither necessary nor desirable. I am satisfied that if the Officers of the Company would exert themselves with this end in view, they might with ease and with perfect propriety greatly simplify and cheapen the system of cheque, by tickets, &c., in its application to the 4th Class passengers.

No. 3. 10. I would recommend that the rules* forwarded by the Agent and submitted herewith, be also sanctioned.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 7th June 1856.

To T. PYCROFT, ESQUIRE,

Chief Secretary to Government, Fort St. George.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 180.

Extract from Minutes of Consultation, dated 12th June 1856.

Read letter from Consulting Engineer for Railways, 7th June 1856, No. 108.

The Right Honorable the Governor in Council sanctions the table of fares for passengers including that for the fourth or slow train class—

and that for parcels, horses, carriages, palankeens and dogs as proposed by the Railway Agent and submitted by the Consulting Engineer. It will however be distinctly understood that these rates are sanctioned only experimentally to be in force for the period of one year from the date of the opening of the Line and they will be subject to revision should the Government desire it at the expiration of that time. The Governor in Council also approves the proposed Rules.

2. The Agent should submit a revised table of Fares, No. 1, incorporating in it the rates for the fourth or slow train passenger class now given separately.

3. The Right Honorable the Governor in Council concurs in the remarks of Colonel Pears in para : 9 of his observations and desires that they be communicated to the Railway Agent and Manager and his attention be called to them.

(True Extract)

T. PYCROFT,

Chief Secretary to Government.

RAILWAY DEPARTMENT,

CONSULTING ENGINEER'S OFFICE.

No. 287.

FROM LIEUTENANT COLONEL T. T. PEARS, C. B.

Consulting Engineer for Railways.

TO MAJOR T. A. JENKINS,

Agent and Manager of the Madras Railway Company.

SIR,

I have the honor to forward for your information copy of an Order of Government with that of a despatch from the Secretary to the Government of India No. 166 dated 5th June 1856.

conveying instructions from the Governor General of India in Council on the subject of the charge for and classification of "Goods" on the Madras Railway and I have to request you will, at your earliest convenience, prepare and submit for sanction a table of rates prepared in accordance with their instructions, the lowest rate being somewhat lower than that in Bengal which is $\frac{1}{2}$ pie per maund and the whole being divided into 3 Classes.

2. As regards the classification, I would suggest to you something like that shown in the accompanying table, for the lowest class of which it appears to me that $\frac{1}{4}$ pie per maund per mile would be a reasonable charge to begin with, though not so low as in my opinion goods might be carried on your Railway with advantage to all concerned.

3. In the tables which have been already prepared, I find there are 191 different descriptions of "goods," many of these are of little importance, and it matters little what Class they are thrown into.

4. The correct classification of all these articles upon sound intelligible principles would be almost impossible.

5. I conceive however that we may confidently yield ourselves to the guidance of the following broad principles.

That the various descriptions of goods will bear a charge in proportion as their value in relation to the bulk or weight increases, that it is of the utmost importance to the Railway proprietors, as well as to the people of the country, that those commodities which form the staple product of the country should be fostered and encouraged by offering the Railway for their transport at the lowest possible charges.

6. You will find that acting upon these considerations, I have thrown into the cheapest class grain, cotton, sugar, hides and other articles of raw produce, a reduction in the cost of carriage of these being certain to lead to an extended production and necessarily to a large increase in the business of the Railway.

I have &c.,

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 7th June 1856.

MADRAS RAILWAY,
19TH JUNE 1856.

No. 404.

FROM MAJOR T. A. JENKINS,
Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.,
Consulting Engineer for Railways.

SIR,

No. 166 dated 5th June 1856.
With reference to orders of Government noted in the Margin, I have the honor to forward* Tables of Charges for the Carriage of Goods, and a time Table for passenger Trains, prepared as therein called for.

I have &c.,

T. A. JENKINS,
Agent and Manager.

Submitted (with Observations) for the orders of Government.

T. T. PEARS,
Consulting Engineer for Railways.

Madras, 21st June 1856.

TO T. PYCROFT, ESQUIRE,
Chief Secretary to Government,
Fort Saint George.

* See Appendix—with letter from Consulting Engineer, No 287, dated 7th June 1856.

No. 123.

On a letter from the Agent and Manager of the Madras Railway Company, No. 404, dated 19th June 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

The table of charges for "Goods" submitted with this letter has been prepared in accordance with the instructions conveyed in a late despatch from Calcutta, and with suggestions made to the Agent from this Office.

2. The Goods according to the list previously adopted are now arranged under three classes, charged severally $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ pie per maund, or $6\frac{3}{4}$ Pies, 1 A. $1\frac{1}{2}$ P., 1 A. $8\frac{1}{4}$ P. per ton per mile.

3. In the first or lowest class much of the cheap and bulky produce of the country is thrown, Cotton, Grain, Salt, Sugar, &c.

4. The reduction in the cost of transit, as compared with the present rates by common cart, is sufficient I think to ensure to the Railway a very considerable share of the present traffic; and even to stimulate agricultural enterprise.

5. Whether these rates may one day be brought still lower will depend, in great measure, on the amount of work thrown on to the Railway.

6. I would recommend that the Agent be authorized to adopt and publish this table of "Goods" charges.

T. T. PEARS,
Madras, 21st June 1856. *Consulting Engineer for Railways.*
TO T. PYCROFT, ESQUIRE,
Chief Secretary to Government, Fort Saint George.

MADRAS RAILWAY,
JUNE 18TH 1856.

No. 394.

FROM MAJOR T. A. JENKINS,
Agent and Manager.
TO LIEUTENANT COLONEL T. T. PEARS, C. B.,
Consulting Engineer for Railways.

SIR,

1. With reference to Extract Minutes of Consultation, No. 161, dated the 2nd Instant, I have the honor to annex a copy of a letter

from the Traffic Manager in which he recommends that the Good's Trains shall run on alternate days, leaving Madras at 9 A. M. on Mondays, Wednesdays, and Fridays, and the Arcot station on Tuesdays, Thursdays, and Saturdays at 8 A. M. This arrangement I beg to recommend for the sanction of Government.

2. Should the trade be found sufficient to necessitate the running of a greater number of Trains, I shall do myself the honor to communicate the same to you.

3. I annex a copy of the proposed Time Table for Goods Trains.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Submitted (with Observations) for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856,

To T. PYCROFT, Esq.,

Chief Secretary to Government Fort Saint George.

MADRAS RAILWAY,
TRAFFIC MANAGER'S OFFICE,
JUNE 16TH 1856.

No. 107.

FROM H. A. FLETCHER, Esq.,

Traffic Manager.

To MAJOR T. A. JENKINS,

Agent and Manager.

SIR,

Referring to the Extract Minutes of Consultation, No. 161, of the 2d instant, I have the honor to propose that a good's Train shall leave Madras at 9 A. M. on Mondays, Wednesdays and Fridays, and that a good's Train shall leave Arcot on Tuesdays, Thursdays and Saturdays, at 8 A. M.

I enclose the proposed times of running these Trains East and West, and beg to observe that the speed of ten Miles per hour including stoppages, as ordered by the Government, is a slower speed than generally adopted upon other Railways, probably the speed of Goods Trains could be maintained at 15 miles per hour including stoppages, with

greater convenience, and with very little, if any, additional cost to the Company.

The times of departure from each end of the Line, have engaged the attention of the Locomotive Superintendent as well as myself, and we are both of opinion that for general convenience the times cannot be better selected.

The advantages of these times are that they involve no meeting place upon the Line with either the East or West Passenger Trains, and they enable us to keep open the receipt of Goods at Arcot until 7 A. M. of the day of departure, which may be of importance, as probably the bulk of the Goods loaded there will travel by Bandies during the night. I think it will also be an advantage to receive Goods until 8 A. M. of the morning of departure of the Goods Train from Madras which the departure at 9 A. M. will enable us to do. This arrangement will also be very convenient as regards the working of the waggons and placing the greatest number at our disposal for the Good's Trains, at each end of the Line.

The objection to these hours (9 A. M. from Madras and 8 A. M. from Arcot) is that it will expose the Engine Drivers, Guards, &c. to the heat of the weather during the whole time of travelling.

I have &c.,

H. A. FLETCHER,

Traffic Manager.

MADRAS RAILWAY.

Proposed Time Table for Good's Trains on and after Tuesday, July 1st 1856.

TRAIN WEST FROM MADRAS, MONDAY, WEDNESDAY, AND FRIDAY.

Miles.	Stations.	Train.
	Royapooram.....Dep.	A. M. 9 0
3½	Perambore.....	9 25
7½	Red Hills Road.....	9 55
13	Avady.....	10 30
18	Tinnanore.....	11 0
26	Trivellore.....	11 48
29½	Cudumbatore.....	12 13
36½	Chinnamapet.....	12 53
45¾	Companypet.....	1 43
56	Sholinghur.....	2 35
65¼	Arcot.....Arr.	2 30

TRAIN EAST TO MADRAS, TUESDAY, THURSDAY AND SATURDAY.

Miles.	Stations.	Train.	
	Arcot.....Dep.	A.	M.
9 $\frac{1}{4}$	Sholinghur.....	8	0
19 $\frac{1}{2}$	Companypet.....	8	55
29	Chinnamapet.....	9	47
35 $\frac{3}{4}$	Cudumbatore.....	10	37
39 $\frac{1}{4}$	Trivellore.....	11	17
47 $\frac{1}{4}$	Tinnanore.....	11	42
52 $\frac{1}{4}$	Avady.....	12	30
57 $\frac{3}{4}$	Red Hills Road.....	1	0
61 $\frac{1}{2}$	Perambore.....	1	35
65 $\frac{1}{4}$	Royapooram.....Arr.	2	5
		2	30

H. A. FLETCHER,
Traffic Manager.

(True copy.)

T. A. JENKINS,
Agent and Manager

No. 124.

On a letter from the Agent and Manager of the Madras Railway Company No. 394, dated the 18th June 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

Extract Minutes of Consultation Financial (Railway) Department, No 161, dated 2d instant.

With reference to an order of Government, as per margin, the Agent submits for approval a time table for goods trains, proposing that for the present they should run East and West, between Madras and Arcot, on alternate days.

2. On Mondays, Wednesdays, and Fridays, the train would leave Madras at 9 A. M. and reach Arcot at 3 30 P. M. On Tuesdays, Thursdays, and Saturdays, it would leave Arcot after the passenger train or at 8 A. M. and arrive at Madras (before the departure of the passenger train) at 2 30 P. M.

3. The Traffic Manager remarks in his letter, that the speed of 10 miles an hour is slower than that generally adopted upon other Railways—and suggests 15 miles an hour as a speed attended with greater convenience, and with very little, if any, additional cost.

4. Our object is to carry the goods at the cheapest possible rate. When we have so much work to do that we can only perform it by running quicker, I should—within certain limits—advocate an increase of speed.

5. That carrying goods at 15 miles an hour must be more expensive than carrying at 10, is indisputable. The true policy of Government and the Railway Company is to have the line worked as cheaply as possible; and I can see no good cause for wishing to run the goods quicker than the pace first proposed.

6. I would recommend that the Agent be authorized to adopt and publish the time table now submitted.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856,

To T. PYCROFT, Esq.,

Chief Secretary to Government, Fort Saint George.

FINANCIAL (RAILWAY) DEPARTMENT.

Extract Minutes of Consultation, 23d June 1856, No. 191.

From Consulting Engineer for Railways, 21st June 1856, No. 123.

From do. do. 21st June 1856, No. 124.

With the first of the above papers the Consulting Engineer for Railways submits a table of charges for goods, which has been prepared in accordance with the instructions recently received from Calcutta, and with suggestions made by himself to the Agent.

2. The rates for the three classes are severally

	Per Indian Maund.	Per Ton.
		A. P.
First Class per mile, - - -	$\frac{1}{4}$ Pie.	0 6 $\frac{3}{4}$
Second Class do. - - -	$\frac{1}{2}$ do.	1 1 $\frac{1}{2}$
Third Class do. - - -	$\frac{3}{4}$ do.	1 8 $\frac{1}{4}$

3. Much of the cheap and bulky produce of the country, cotton grain, salt, sugar, &c., falls in the first class.

4. It is believed by the Consulting Engineer that the reduction in the cost of transit, under these rates, as compared with the present rates by common cart, is sufficient to ensure to the Railway a very considerable share of the present Traffic, and serve to stimulate agricultural enterprise.

5. The Right Honorable the Governor in Council sanctions the goods rates thus proposed, on the distinct understanding that they are to be experimental only, to be in force for one year from the opening of the line and to be subject to revision by Government at the expiration of that period.

6. With his second paper, No. 124, Colonel Pears forwards a time table for goods trains. It is proposed that they shall run East to West between Madras and Arcot on alternate days, leaving Madras at 9 A. M. on Mondays, Wednesdays and Fridays—and Arcot at 8 A. M. on Tuesdays, Thursdays and Saturdays. The Government approve this proposal.

7. The Government concur with the Consulting Engineer that there is no good cause why, for the present at least, the speed of the Goods Train should exceed ten (10) miles an hour. Should the Consulting Engineer see any reason at some future time for the speed being increased he will notify it to Government.

8. The Agent is authorized to adopt and publish the Table of Goods charges, and Train Table, Nos. 1 & 2, which he has submitted.

(True Extract.)

T. PYCROFT,

Chief Secretary to Government.

MADRAS RAILWAY,
20TH JUNE 1856.

No. 406.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer.

SIR,

In forwarding the Rates and Fares proposed to be established on this Railway with my letter of yesterday's date, I overlooked the necessity of bringing specially to your notice the fact that we have not means and appliances at the present time for working a 4th Class Train, and would therefore beg to suggest that that Rate be not published for the present.

2. I beg to explain that on the receipt in your last of the order of the Supreme Government, sanctioning the experiment of a 4th Class being tried on this Line of Railway, the Board of Directors, not having anticipated the same, had made no provision for the accommodation of his Class of Passengers; but I lost no time in addressing them upon this matter. I have been informed that the Directors have addressed the Home Authorities on the subject, and I am looking forward to the result of their reference by the next Mail.

3. The Rolling Stock which has been completed up to the present time, is not equal to our probable requirements, particularly when we include the conveyance of our permanent way materials.

4. The Carriage and Wagon Construction Department have been engaged to the fullest extent of their means and appliances, and had even the necessary Iron work for 4th Class Carriages been on the spot, and their construction commenced in January last, the time would not have admitted of their being built in addition to the other part of our plant.

5. I therefore request that you will lay the matter before the Government, and express my regret that through an oversight the want of carriage accommodation for this Class of Passengers was not previously explained.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Submitted (with Observations) for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort St. George.

No. 127.

On a letter from the Agent and Manager of the Madras Railway Company, No. 406, dated 20th June 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

The Agent in this letter reports that he does not possess means and appliances at the present time for working a 4th Class Train, and suggests that that rate be not published for the present. He seems to refer to the carriages.

2. The sanction of the Supreme Government to the proposed 4th Class Fare was forwarded to the Agent on the 24th of January last; and I see in the report of rolling stock finished and in hand up to the 31st of May no mention made of 4th Class Carriages.

3. Major Jenkins speaks in the 2d para: of this letter of a reference to the Directors on the subject. He does not state however that he made any application for iron work for these carriages.

4. Among the vehicles reported ready, or in course of construction on the 31st of May, I find the following:—

	Ready.	In hand.
3d Class Carriages.....	16	5
Cattle Wagons.....	10	0

The former differ but slightly from the Carriages required for 4th Class Passengers, either in plan or cost, while the latter would do well enough on an emergency for that class of passengers.

5. The Agent says, "the rolling stock completed up to the present time is not equal to our probable requirements," but this should have been thought of before; and appears hardly consistent with the opinion expressed in that Gentleman's letter,* No. 157, of the 19th March 1856, when he proposed running mixed trains on the grounds, suggested by the Traffic Manager, that the number of passengers or weight of goods might not in the first instance be sufficient to pay the expense of being separately run.

6. At all events supposing the stock to prove at first insufficient, I do not see any good reason for making one particular Class of Passengers suffer more than the other, or more than the goods. They should lose no time in getting up the necessary stock, and indeed they are mak-

ing good progress in that department; and in the meantime each Class of Passengers and goods may fairly be expected to bear its share of the inconvenience, resulting from present inadequacy of carriage accommodation.

7. At all events the conveyance of Cattle may be deferred with greater propriety than that of any Class of Passengers.

8. I have already requested the Agent to publish the table of fares complete; and have intimated to him that should the Government approve of the actual running of 4th Class fares being postponed, it will be easy to make the same known to the public by subsequent notification.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

*Fort Saint George.*MADRAS RAILWAY,
21ST JUNE 1856.

No. 407.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer for Railways.

SIR,

1. In advertence to the last paragraph of your letter, No. 312, dated 19th Instant, I have the honor to state that this Company is now prepared to open the first Section of this Line of Railway, 64½ Miles from Madras to Arcot for Traffic, on the 1st day of July next, with the exception, as explained to you in my letter of yesterday's date, No. 406, of the conveyance of 4th Class Passengers.

2. I request that you will move the Government to sanction the Line being opened on the day abovementioned, and that Act XVIII of

A STATEMENT of Rolling Stock finished, and that in the course of Erection and Construction up to 31st May 1856.

Erected.	Up to 30th April 1856.	This month May.	Total.	In the course of Erection.	Up to 31st May 1856.	Remarks.
LOCOMOTIVES.				TANK LOCOMOTIVES.		Passenger Engines No. 12 & 13.
Passengers Engines No. 1 and 2.....	2	0	2	Passenger Engines No. 9, 10, 11 and 16.....	4	These Engines have been put upon their wheels, and are put aside for the present.
Goods Engines No. 3 and 4.....	2	0	2			
TANK LOCOMOTIVES.						
Passenger Engines No. 7, 8, 14, * & 15.†	2	2	4			
Goods Engines No. 5, 6, 17*, 18 & 19.	4	1	5			

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Finished.	Up to 30th April 1856.	This month May.	Total.	In the course of Construction.	Up to 31st May 1856.	Remarks.
* 1st Class English Carriage ...	1		1	3d Class Carriages.....	5	* This Carriage is from England put together here.
† 2d Class Carriages ...	4		4	Passenger Break Vans.....	3	
† 3d Class Carriages ...	13	3	16	Horse Box.....	1	
Ballast Wagons ...	25		25	Covered Goods Wagons.....	31	
Open Goods Wagons... ..	20	10	30	Goods Break Vans.....	6	† One of these from England put together here, the remaining three were built here in our Workshops.
Carriage Trunks ...	4		4	Open Goods Wagons.....	20	
Hopper Coal Wagons... ..	5		5	Platform Wagons.....	12	
Cattle Wagons... ..	10		10			
Coke Wagons ...	10		10			These frames have been attached to Carriages* received from Simpson & Co.
Under Frames for Carriages... ..	10		10			
At MESSRS. SIMPSON & Co's.						
* { 1st Class Carriages... ..	2	0	2			
{ Composite Carriage... ..	4	4	8			

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Madras Railway, Locomotive and Carriage }
 Departments, 31st May 1856.
 To LIEUT. COL. T. T. PEARS, c. b.,
Consulting Engineer for Railways.
 For information 16th June 1856.

(Signed) W. B. WRIGHT,
Locomotive Superintendent.
 (True Copy.)
 T. A. JENKINS,
Agent and Manager.

Submitted with observations for the orders of Government.
 Madras, 21st June 1856. T. T. PEARS, *Consulting Engineer for Railways.*
 To THE CHIEF SECRETARY TO GOVERNMENT, Fort Saint George.

No. 127.

On a letter from the Agent and Manager of the Madras Railway Company, No. 406, dated 20th June 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

The Agent in this letter reports that he does not possess means and appliances at the present time for working a 4th Class Train, and suggests that that rate be not published for the present. He seems to refer to the carriages.

2. The sanction of the Supreme Government to the proposed 4th Class Fare was forwarded to the Agent on the 24th of January last; and I see in the report of rolling stock finished and in hand up to the 31st of May no mention made of 4th Class Carriages.

3. Major Jenkins speaks in the 2d para: of this letter of a reference to the Directors on the subject. He does not state however that he made any application for iron work for these carriages.

4. Among the vehicles reported ready, or in course of construction on the 31st of May, I find the following:—

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The former differ but slightly from the Carriages required for 4th Class Passengers, either in plan or cost, while the latter would do well enough on an emergency for that class of passengers.

5. The Agent says, "the rolling stock completed up to the present time is not equal to our probable requirements," but this should have been thought of before; and appears hardly consistent with the opinion expressed in that Gentleman's letter,* No. 157, of the 19th March 1856, when he proposed running mixed trains on the grounds, suggested by the Traffic Manager, that the number of passengers or weight of goods might not in the first instance be sufficient to pay the expense of being separately run.

6. At all events supposing the stock to prove at first insufficient, I do not see any good reason for making one particular Class of Passengers suffer more than the other, or more than the goods. They should lose no time in getting up the necessary stock, and indeed they are mak-

ing good progress in that department; and in the meantime each Class of Passengers and goods may fairly be expected to bear its share of the inconvenience, resulting from present inadequacy of carriage accommodation.

7. At all events the conveyance of Cattle may be deferred with greater propriety than that of any Class of Passengers.

8. I have already requested the Agent to publish the table of fares complete; and have intimated to him that should the Government approve of the actual running of 4th Class fares being postponed, it will be easy to make the same known to the public by subsequent notification.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

*Fort Saint George.*MADRAS RAILWAY,
21ST JUNE 1856.

No. 407.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer for Railways.

SIR,

1. In advertence to the last paragraph of your letter, No. 312, dated 19th Instant, I have the honor to state that this Company is now prepared to open the first Section of this Line of Railway, 64½ Miles from Madras to Arcot for Traffic, on the 1st day of July next, with the exception, as explained to you in my letter of yesterday's date, No. 406, of the conveyance of 4th Class Passengers.

2. I request that you will move the Government to sanction the Line being opened on the day abovementioned, and that Act XVIII of

1854 as relating to this Railway, may be declared as coming into force from the said date, the 1st July next.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Submitted with observations for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort Saint George.

No. 129.

On a letter from the Agent and Manager of the Madras Railway Company, No. 407, dated 21st June 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

The Agent in this letter reports that he is prepared to open the line as far as Arcot on the 1st proximo, with the exception of the 4th Class passengers.

2. It remains for the Government to determine whether with reference to my report, No. 127, of this date, the opening of the Line to the public under such conditions shall be sanctioned.

3. Government will observe that the Agent is prepared to open the Line to general traffic though, as shewn in his letter, No. 406, of the 20th instant, he believes his stock to be insufficient; but it is the 4th Class passengers only that he desires to exclude entirely upon that plea.

. Report, No. 127, dated 21st June 1856.

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 21st June 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,

Fort St. George.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 193.

Extract Minutes of Consultation, dated 23d June 1856.

Read the following papers from Consulting Engineer, 21st June 1856, Nos. 127 & 129.

The Consulting Engineer forwards a letter from the Railway Agent representing that he has not means and appliances for working a 4th Class Passenger Train, and suggesting that the rate for that Class be not published for the present.

2. The orders of the Government of India sanctioning a fourth or slow train for Passengers were communicated to the Agent on the 24th January last. His omission to bring sooner to notice the apprehended deficiency in the rolling stock arose, it is explained, from an oversight.

3. The Consulting Engineer points out that the present representation of the Agent is not consistent with the opinion expressed by that Gentleman in his letter of 19th March last, when he proposed to run mixed trains on the ground that the number of passengers or weight of goods might not be sufficient at first to pay the expence of being separately run. He observes also that the 3d Class Carriages differ put slightly from those required for the 4th Class, and that the Cattle Waggons would do well enough on an emergency for that Class—and he submits that if the stock should at first prove insufficient, there is no reason why one particular Class of passengers should suffer more than the rest, or more than the goods—and that each Class of passengers and goods may fairly be expected to bear its share of the inconvenience resulting from present inadequacy of carriage accommodation.

4. In these views the Right Honorable the Governor in Council quite concurs—and he therefore directs that the Agent be required to make some arrangement with third Class Carriages or Cattle Waggons which will enable fourth Class passengers to travel at once—as the goods and slow Class trains are to run only on alternate days there appears no reason to apprehend any difficulty in this.

5. Under this arrangement the Right Honorable the Governor in Council authorizes the Line being opened for Traffic as far as Arcot on the first Proximo, from and after which date the Provisions of Act XVIII 1854 will be applicable to it.

T. PYCROFT,

Chief Secretary to Government.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 199.

Extract Minutes of Consultation, dated 25th June 1856.

Resolved in reference to Despatch, Financial Railway Department, No. 13, 21st May 1856, this day received from the Honorable the court of Directors that the introduction on the Madras Railway of a fourth or slow pace Passengers Train be suspended until further orders—and that so much of the Table of Fares sanctioned by this Government under date the 12th Instant as has reference to the said Train be not published.

In all other respects the Tariff for Passengers and Goods sanctioned experimentally on the above date will remain in full force.

(True Extract.)

T. PYCROFT,

Chief Secretary to Government.

MADRAS RAILWAY COMPANY,
33 NEW BROAD STREET,
LONDON, 10TH APRIL 1856.

No. 382.

SIR JAMES C. MELVILL, K. C. B.,

SIR,

The Board of Directors having had under consideration the Tariff of Rates and Fares to be established for the Railway; in connection with the correspondence and information they have lately received from India on the subject, I have the honor, by their desire, to submit for the approval of the East India Company in terms of the Contract, a scale of the charges for the conveyance of goods and passengers, which, in their opinion, should be adopted.

2. The question, as the Honorable Court will be aware, has been for sometime under consideration and discussion, and has been the subject of very various views, by the Authorities in India. The Company's Agent in compliance with the request of the Consulting Engineer of the Madras Government, first submitted his views on it in May last, expressing his regret at being called on to do so, before the arrival of the Traffic Manager from England. The Consulting Engineer, it appears, reported against the Tariff proposed by the Agent, (which differed little from those of the Bengal and Bombay Railways) and in favor of lower rates for certain classes of passengers, and of one uniform

low rate for goods of every description. The Government however took a different view, and one accordant with the Agent's, in respect to passenger fares, with the important exception of their approving of the introduction, as recommended by Colonel Pears, of an additional, or 4th Class of passengers, to travel by goods trains at fares so low, as it is considered by the Company's Officers, would not pay the working expenses. The observations and orders of the Government of India on the foregoing papers were conveyed in their despatch to the Madras Government, of the 28th November last, in which a preference was given to the rates of passenger fares proposed by Colonel Pears, (being similar to those of Bengal,) the raising of the 3rd Class fare to 4 pie per mile, from 3 pie, the Bengal rate, being approved however as it was doubted whether that was a sufficiently remunerative rate to the Railway. The President in Council, advertent to the fourth Class, proposed to accompany Goods Trains at a fare of only $1\frac{1}{2}$ pie per mile, observes, "that much consideration and more data than the Government possess, are necessary to fix the proper fare for this Class;" that the diminution of cost in conveyance will be merely in the consumption of fuel, and slightly in the tear and wear of rails, and carriages, while against this must be set the cost of additional service and additional precautions against evasion of payment and over riding, for which the slow pace and frequently stoppages (to allow the other trains to pass) would afford many facilities. The Government of India nevertheless conclude by sanctioning the experiment of a slow 4th Class Train on the rate proposed by Colonel Pears, viz. $1\frac{1}{2}$ pie or $\frac{1}{4}$ of a farthing per mile, being exactly half the Bengal lowest fare, (of which the sufficiency is doubted) and equal in English money to a charge of three half pence for a distance of eight miles.

3. The President in Council then advertent to the principles on which Colonel Pears would define the duties of Government towards the Railway Companies on one hand, and the public on the other, gives his opinion "that when the Railways begin to return large surplus profits, it will be time enough to consider what proportion of these should be applied to the reduction of fares, but that at present the greatest benefit which can be conferred on India in connexion with Railways would be to prove beyond dispute, that they are a safe and profitable investment of Capital independently of the Government guarantee;" His Honor in Council therefore thinks "that Government should be very cautious in adopting any measures of which the obvious or even probable tendency is, the diminution of Railway profits."

4. No better definition, in the Board's humble opinion, could be desired of the principles by which the decision of Government in this case should be guided, but they must beg to express their conviction, and they trust they may convince the Honorable Court, that to make the Railway carry passengers at a fare so obviously, as it appears to them, unremunerative, would be to lose sight of those principles altogether.

5. The Government of India went on to declare their preference for the Bengal goods Tariff, over that proposed by the Agent, condemning at the same time, Colonel Pears' proposal to reduce "the rate for all descriptions of goods to a dead level of 8 pie per ton per mile."

6. This dispatch of the Government of India was communicated to the Agent, by the Government Consulting Engineer, under date the 24th January, the Company's Traffic Manager having, in the meantime, prepared and sent in a careful and elaborate report on this subject founded on fifteen years varied experience in the traffic of English and Irish Railways, and a consideration of such of the Returns of the Indian Railways, as he had had an opportunity of perusing and comparing with the working of other lines. His Report, appears to the Board to be of so practical and convincing a character, that they cannot but think it would, if it had been before the Government of India, when this question was considered, have materially influenced and modified their opinions. The Report was forwarded by the Agent to the Madras Government on the 5th January last, and the Board trust it is now before the Honorable Court.

7. The Traffic Manager concurs with the Agent, and the Madras Government, as to the rates 1st and 2nd Class Passengers, but proposes a fare of 6 instead of 4 pie per mile for the 3d Class, for reasons to which justice can only be done by reference to the Report itself, and strongly recommends that the low rate of charges (for the 4th Class proposed by Colonel Pears) be not carried into practice as he is of "opinion that cheap fares by carriages attached to the Goods Trains as a regular or daily arrangement, would prove ruinous to the ordinary Passenger Traffic of the Railway."

8. The Agent in forwarding Mr. Fletcher's Report to Government, cites the concurring opinions of the other Officers of the Company, also founded on experience, against the adoption of very low fares, avows his own change of opinion on this point, and urgently recommends that the scale of rates proposed by the Traffic Manager be sanctioned.

9. The following table will show the rates of Passenger Fares as proposed by the Madras Government, as laid down by the Government of India in their despatch, and as recommended by the Agent and Traffic Manager of the Company.

RATES OF PASSENGERS FARES

Per mile proposed.

	By Madras Government.			By Government of India.			By Traffic Manager of Railway Company.		
	A.	P.	d.	A.	P.	d.	A.	P.	d.
1st Class.	2	0	= 3	1	6	= 2½	2	0	= 3
2d Class.	1	0	= 1½	0	9	= 1½	1	0	= 1½
3d Class.	0	4	= ½	0	4	= ½	0	6	= ¾
4th Class.	1½	3	*of 1	0	1½	3*of 1			

* Or ¾ of ½d. (one farthing)

10. After the most careful examination of the question, and all the documents bearing on it, the Board are decidedly in favor of adopting the 1st and 2d Class fares proposed by their Traffic Manager, as well as by their Agent and Manager, and approved by the Madras Government. The 1st Class fare is that of the Bombay Railway also. The 3d Class fare proposed by the Traffic Manager and also strongly recommended by the Agent, though higher by one farthing a mile, than the rate approved by the Government of India, is in their opinion sufficiently low to develop the Traffic of the country, while, at the same time, it is not too low to leave a fair remuneration to the Company.

11. It is well observed by the Madras Government in reference to Colonel Pears' proposal, to begin with very low fares, that it would not be easy afterwards to raise them. Nothing, on the other hand, is easier than to lower them, if experience should prove them to be too high.

12. It will moreover be admitted that in determining the proper scale of fares for a country, reference should be had to its peculiar conditions and character, and in this view the Board submit that Bengal cannot properly be taken as a standard in all points for Madras. The rates of wages, prices, and cost of conveyance generally are higher in the latter presidency, and therefore a higher Railway fare at Madras, may be actually lower in comparison with the pre-existing state of things than the smaller fare was at Calcutta.

13. It must also be remembered that the cost of fuel, which is an important item of charge, will of necessity be higher at Madras and further that the existing Bengal 3rd Class fare is supposed to have been fixed too low.

14. Bearing these facts in mind, at the same time anxious to go as far as they can with prudence, to meet the views of the Government in promoting the passenger Traffic, the Board beg to propose as a middle course, a fare of 5 pie or $\frac{5}{8}$ ths of a penny per mile for the 3rd Class.

15. The Board however most strongly and decidedly concur in the opinion of their Officers, of the inexpediency and risk of introducing, as has been proposed, a 4th Class of passengers, to be carried with Goods Trains, at a fare of a fractional part of a farthing a mile. They see no reason to think that the expense of carrying such passengers, would be in any appreciable degree less, while the risk of evasion and fraud would, as the Government have remarked, be much greater than in ordinary trains and they apprehend, that such traffic if not a source of actual loss, could not possibly be remunerative to the Railway. Its ruinous effects on the regular 3d Class trains also, have been foretold by the Traffic Manager, and the Board, concurring in his views, feel bound to protest against a measure which they think calculated to lead to such results.

16. The classes and fares therefore which they have to request the East India Company to sanction are

1st Class	- - - -	2 Annas or 3 pence	per mile.
2d Class	- - - -	1 Anna or 1½	do do.
3d Class	- - - -	5 Pie or $\frac{5}{8}$	do do.

17. The Rates for Goods proposed by the Traffic Manager, as in his judgment, the best calculated to command the traffic, and develop the resources of the country, and at the same time, to prove remunerative to the Company, are as follows, the rates of the Bengal Railway as quoted and approved by the Government of India, for this Railway being prefixed for comparison.

	Bengal Rates approved by Govt. of India.	Rates proposed by Traffic Manager.			
		A.	P.	=	d
1st Class.....	per Ton.....	0	8	=	1½
2d Class.....	do.	1	5	=	2
3d Class.....	do.	2	2	=	2½
4th Class.....	do. (none)	2	0	=	3

18. No very accurate comparison can be made between the two scales without comparing, first, the respective systems of classification, which the Board have scarcely the means of doing satisfactory. So far however as appears, the only material difference is in the rate of the lowest class of goods, and this may probably on examination to some extent disappear. The Bombay rate for this class, it may be observed approaches much nearer to the Traffic Manager's, being very nearly 11 pie per ton per mile against his 12 pie, or one anna.

19. It may also be observed that the average rate per ton of all classes together for both the foregoing scales is the same within less than a pie, the Bengal one being the higher. Its maximum rate is also higher than that of the Traffic Manager's scale.

20. Under these circumstances, and considering the greater cost of fuel for this Railway on the one hand, and the absence of all competition by water carriage on the other, together with the actual state of the land carriage of the country, the Board, with great confidence in the judgment and experience of Mr. Fletcher, and the care with which he has evidently studied the question on the spot, beg to submit the Tariff he has proposed for goods, for the approval of the Honorable Court.

21. Not to add unduly to the length of these observations, by noticing farther in detail, the tariff proposed by the Traffic Manager, for the minor articles of Parcels, Cattle, Horses, Carriages, Dogs, &c. the Board will submit his rates for them as annexed, with their request that the same, being recommended by the Agent, and approved by them, may also receive the sanction of the East India Company.

22. There remains an important question relating to the Traffic, to which the Board beg in conclusion to draw the Honorable Court's attention, viz. the standard or denominational weight, to be employed in the business of the Railway.

23. They regret to observe that the Government of India, in the dispatch before quoted, have been pleased to direct the introduction for this purpose of a new weight, termed the Indian maund, equal, it is stated, to 82 $\frac{2}{3}$ lbs. avoirdupois. It must be needless for the Board to point out the serious inconvenience and objections for all purposes of account, attaching to a weight composed of a broken number and fractional parts of pounds, when its conversion into pounds and *vice versa*, will be at every moment necessary. As the Traffic Manager remarks, whatever scale may be laid down, the pound will be the real standard, to and from which any other weight will in practice be converted. Had the weight in question been known in the Madras Presidency, or in any part

of the territories through which the railway is to run, its adoption, however inconvenient to the Company, might have had its advantages. But such is not the case, and its addition to the many other weights in use, can only add to the confusion of Maunds already existing. If a weight of that name is to be chosen, the Board would give a decided preference to the Madras maund of 25 lbs. as already in use under the Government Proclamation, 20 of these make a Candy of 500 lbs. and $4\frac{1}{2}$ Candies a Ton. These weights, which are well and generally known throughout the Madras Presidency, the Board consider far preferable for all purposes of account, and statistics, to the proposed maund of 82 $\frac{1}{2}$ lbs.

24. The Board are in a position to state that the mercantile community of Madras are decidedly averse to this change, as also, they understand, is the Madras Government. The standard weight of the Port, and so of all imports and exports, is the Ton; and it is stated by the Traffic Manager, that even the bandy owners engaged in carrying into the districts through which the line runs, now compute their rates for goods and parcels by the lb. avoirdupois.

25. Under these circumstances, the Board would strongly urge the expediency of either retaining the established Madras maund, or substituting in its stead, a weight representing some decimal number of pounds, or some aliquot part of a ton.

26. The Board cannot but believe that in directing the use of the Indian maund on this Railway, its interests and those of the public would be sacrificed to a supposed, but unreal advantage of uniformity. It will still be many years before the Madras and Bengal Railways run into each other, so as to realise that advantage, and before that time arrives, it is not perhaps too much to expect that some more desirable common standard weight may be devised than that now proposed, which the Board observe has been objected to by the East Indian and the great Indian Peninsula Railways, as well as by themselves. Against the introduction of a measure of which the advantages are so little apparent, and the disadvantages so palpable, and so generally agreed on, the Board can have no hesitation in requesting the interposition of the Honorable Court.

27. At the request of their Chairman, the Board beg to transmit with this letter, the accompanying paper in which are stated his opinions in favor of a somewhat lower rate for the lowest Class of Passengers, and of Goods, than they have adopted, and now submit for the approval of the East India Company.

I am, &c.,
J. A. WALKER,
Managing Director.

MEMORANDUM BY THE CHAIRMAN.

MADRAS RAILWAY COMPANY,
33 NEW BROAD STREET,
LONDON, 10TH APRIL 1856.

In determining the fares for 3d Class Passengers and for the first or lowest Class of Goods, I think that sufficient allowance has not been made for the state of the people, the present cost of carriage on the line of country through which the Railway runs, and the difference of the value of money in this Country and in India.

The country is chiefly agricultural, the people generally poor, and unaccustomed as well as disinclined, to travel, and when they do travel, it is mostly on foot. The traffic in goods though considerable, is inadequate for the support of a Railway, and the cost of its carriage, much less than I believe is generally supposed. Under these circumstances it is manifestly to our interest to create a taste in the people for travelling, and to promote the development of the resources and trade of the country by making the cost of carriage as light as possible, especially of the 3d Class Passengers, and the least valuable description of Goods, which will only bear a very low rate of carriage.

The hire of an able bodied laborer at Madras is about six pence a day, and of a good Mason or Carpenter a shilling, if therefore, the fare of the 3d Class be fixed, as is proposed, at 5 pie per mile, a day's wages would carry the former a distance of only 10 miles, and the latter 20 miles, and all acquainted with the native character will, I think, agree, that the Railway would not be generally used by the mass of the people on such terms. For Bengal and Bombay, the fare of the 3d Class is 3 pie, but the Supreme Government has suggested 4 pie for the Madras Railway, because it is uncertain, it is observed, whether the fare of 3 pie in Bengal for the 3d Class, is remunerative, I think it ought not be higher than 4 pie. My only doubt is whether it would not be advisable to begin with 3 pie.

Goods, according to Colonel Pears, are now carried on carts between Wallajahnuggur and Madras, the first 68 miles of the Railway, at the rate of $1\frac{1}{2}$ annas per mile per ton, which is only half an Anna higher than the charge proposed to be made for the lowest Class of goods by the Railway, the same as the mean charge for the 2nd and 3d Classes,

and lower than the charge for the fourth or highest Class. In England, minerals and metals are carried, I believe, at a penny per mile per ton, and in India, the lowest charge as proposed, is a penny halfpenny.

The proposed fares would probably command all the traffic along the line, and also aid in gradually increasing, but not to the extent, or with the rapidity which I consider advisable, both for the interests of the Railway, and the advantage of the Country. I attach little importance to the observation that it is easier to lower fares than to raise them; both, I believe, are equally easy in a country where there is no competition, and our interest is to bring the Railway at once into favor with the people, and to foster the trade and resources of the country.

I concur entirely in the inexpediency of attempting to carry Passengers at the low rate of $1\frac{1}{2}$ pie per mile.

The rates that I would propose are, for Passengers,

1st Class..... 2 Annas or 3d. per mile.
2nd do..... 1 do. or $1\frac{1}{2}$ do.
3rd do..... 4 pie or a halfpenny do.

or Goods.

Per mile.
1st Class..... 9 pie — or $1\frac{1}{2}$ penny.
2d do..... 1 4 = „ 2d.
3d do..... 1 8 = „ $2\frac{1}{2}$
4th do..... 2 = „ 3d.

DUNCAN SIM,

Chairman.

RATES FOR PARCELS, BAGGAGE, DOGS, HORSES, CARRIAGES AND CATTLE,

PROPOSED BY THE TRAFFIC MANAGER.

Present Scale of Charges for Parcels weighing as under by Coolies and Transit Companies.

Distance.	Coolie Load.	7 lbs & under.	14 lbs & under.	28 lbs & under.	42 lbs & under.	56 lbs & under.	84 lbs & under.	112 lbs & under.	140 lbs & under.
5 Miles under.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
5 Miles under.	0 10 0	0 5 0	0 5 0	0 5 0	0 5 0	0 10 0	0 10 0	0 15 0	0 15 0
5 " "	0 10 0	0 5 0	0 5 0	0 5 0	0 5 0	0 10 0	0 10 0	0 15 0	0 15 0
5 " "	1 8 0	0 12 0	0 12 0	0 12 0	0 12 0	1 8 0	1 8 0	2 4 0	2 4 0
5 " "	1 10 0	0 13 0	0 13 0	0 13 0	0 13 0	1 10 0	1 10 0	2 7 0	2 7 0
5 " "	1 12 0	0 14 0	0 14 0	0 14 0	0 14 0	1 12 0	1 12 0	2 10 0	2 10 0

Proposed Scale of Parcels rates per Madras Railway.

Distance.	7 lbs & under.	14 lbs & under.	28 lbs & under.	42 lbs & under.	56 lbs & under.	84 lbs & under.	112 lbs & under.	140 lbs & under.	Every 28 lbs in fractional part.
5 Miles under.	A. P.	A. P.	A. P.	A. P.	A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
5 Miles under.	2 ...	4 0	4 6	5 0	5 6	0 6 6	0 7 6	0 9 6	0 0 10
5 " "	2 ...	4 6	5 0	6 0	7 0	0 8 6	0 10 0	0 12 6	0 1 0
5 " "	2 ...	5 0	6 0	7 6	9 0	0 11 0	0 13 0	1 0 0	0 1 6
5 " "	2 ...	6 0	7 0	9 0	11 0	0 14 0	1 0 0	1 3 6	0 1 9
5 " "	2 ...	7 0	8 6	10 0	13 0	1 0 0	1 3 0	1 7 0	0 2 0

PROPOSED RATES FOR BAGGAGE OF TROOPS.

The Baggage of Troops when conveyed by Goods Trains to be charged per 4th Class of the Goods Tariff, viz: 2 annas or 3d. per Ton per mile; when conveyed by Passenger or Special Train to be charged for Passenger's Luggage at the rate of 4 pies per Madras Maund per mile.

RATES FOR DOGS.

15 Miles and under 4 Annas.
25 do. do. 6 do.
50 do. do. 8 do.
75 do. do. 10 do.
100 do. do. 12 do.
for every additional 100 Miles 12 do.

RATES FOR HORSES.

1 Horse 2 Annas per Mile.
2 do. 3 do. do.
3 do. 4 do. do.

RATES FOR CARRIAGES.

4 Wheeled carriage 4 annas per Mile.
2 do. do. 3 do. do.
Palanquin 2 do. do.

Rates for Conveyance of Cattle.

Distance.	Full Grown.			Calves.			Sheep, Pigs & Goats.			Minimum charge.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
10 Miles.....	0	6	0	0	3	0	0	2	0	1	8	0
20 do.	0	7	8	0	3	6	0	2	6	2	0	0
30 do.	0	9	4	0	4	0	0	3	0	2	8	0
40 do.	0	11	0	0	5	0	0	3	6	3	0	0
50 do.	0	12	8	0	6	0	0	4	6	3	8	0
60 do.	0	14	4	0	7	0	0	5	0	4	0	0
70 do.	1	0	0	0	8	9	0	5	6	4	8	0
80 do.	1	2	0	0	9	0	0	6	0	5	0	0

FINANCIAL RAILWAY DEPARTMENT.
No. 209.

Extract from the Minutes of Consultation dated 1st July 1856.

1. The Right Honorable the Governor in Council proceeds to pass Orders on the following Despatch from the Honorable the Court of Directors, dated 21st May, No. 13 of 1856.

Forward a Correspondence with the Directors of the Madras Railway Company regarding the charges for the conveyance of Goods and Passengers which the Directors wish to be adopted for the Railway at this Presidency and state that the views which the Honorable Court entertain upon the subject are contained in their Secretary's letter to Mr. Walker, the Managing Director.

2. Ordered that a copy of this Despatch and the correspondence accompanying it be furnished to the Consulting Engineer for Railways for his information.

3. The Government have already, under the opinion expressed by the Railway Directors and concurred in by the Honorable Court, directed that the introduction on the Madras Railway of a 4th Class slow pace-Passengers' Train be suspended until further orders, but that in all other respects the Tariff for Passengers and Goods sanctioned experimentally under date the 12th Instant should remain in full force.

4. Ordered that the Correspondence which has passed upon the subject of the scale of charges for the conveyance of Goods and Passengers to be adopted for the Railway at the Presidency be brought to the notice of the Honorable Court by the next mail.

No. 2801.

FROM LIEUTENANT COLONEL W. E. BAKER,

Secretary to the Government of India.

To T. PYCROFT, Esq.,

Chief Secretary to the Government of Fort Saint George.

Dated the 20th June 1856.

*Public Works Department, }
Railway.*

SIR,

I am directed to acknowledge the receipt of your letter, No. 141, dated the 14th ultimo, with enclosure, from the Agent and Manager of the Madras Railway Company, explaining that the Table of Rates and

Fares which he lately submitted, and which were at variance with the recorded decision of Government, was prepared and sent in some days before the orders of the Government of India were communicated to him. The Railway Officers therefore desire to be considered as exonerated from the imputation of having wilfully disregarded those orders.

2. In reply, I am desired to request that you will inform the Madras Railway Authorities that the Government of India are perfectly satisfied with their explanation and that nothing to the contrary of what is stated, was ever imputed to them.

I have &c.,

W. E. BAKER, LIEUT. COL.

Secretary to the Government of India.

Fort William, the 20th June, 1856.

No. 217.

Ordered that a copy of the foregoing letter be furnished to the Consulting Engineer with reference to the Extract Minutes of Consultation of the 14th May last, No. 140, and for communication to the Railway Agent and Manager.

T. PYCROFT,

Chief Secretary to Government.

Fort St. George, 8th July 1856.

RAILWAY DEPARTMENT,
CONSULTING ENGINEER'S OFFICE.

No. 142.

FROM LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer for Railways.

To T. PYCROFT, ESQUIRE,

Chief Secretary to Government.

Fort Saint George.

SIR,

I have the honor to acknowledge the receipt of an Extract from Minutes of Consultation, No. 209, of the 1st instant, forwarding copies of a dispatch from the Honorable Court with correspondence with the Managing Director of the Railway Company on the subject of the tariff.

No. 13 of 1856.

No. 222.

Ordered that a copy of the foregoing letter and of the Minutes recorded by the Honorable Mr. Elliot be forwarded to the Honorable the Court of Directors with reference to their Dispatch of the 21st May, No. 13 of 1856, and in connection with the correspondence to be transmitted to them by the next Mail, and that their earliest attention be solicited to the views contained in Colonel Pears' communication on the subject of the proposed rate for the 4th Class Passengers.

(True Extract)

T. PYCROFT,

Chief Secretary to Government.

Fort Saint George, 8th June 1856.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 9 of 1856.

TO THE HONORABLE THE COURT OF DIRECTORS.

HONORABLE SIRs,

Diary to Consultation 14th August 1855 Nos. 3 to 7.
 " " 28th " " 12, 13.
 " " 15th January 1856 " 3, 4.
 " " 25th April " 11, 12, 13.
 " " 29th " " 5, 6.
 " " 20th May " 9 to 11.
 " " 10th June " 3, 4.
 " " 13th " " 204, 180.
 " " 24th " " 226, 227, 191.
 " " 24th " " 233, 234, 193.
 " " 1st July " 199.
 " " 8th " " 244.
 " " 3d June " 20, 21.
 " " 3d " " 18, 19.
 " " 1st July " 229.
 " " 8th " " 19 to 21.

1. We have the honor to bring under the consideration of your Honorable Court the correspondence noted in the margin, which has passed upon the subject of the scale of Fares and Rules for Passenger Traffic and Goods Tariff to

be adopted for the Madras Railway.

2. In the report which was laid before us with our Consulting Engineer's communication of the 27th June 1855, the Agent of the Railway Company proposed to have, as in Bengal and Bombay, three classes of Passengers, all to travel by the same train. The fares suggested were:

1st Class 2 Annas per mile.
 2d do. 1 do. do.
 3d do. 4 pice do.

3. Goods not including parcels were divided by the Agent into four classes to pay per maund (Indian) per mile:

	Or per Ton.	
	A.	P.
1st Class $\frac{1}{2}$ pice	1	1
2d do. $\frac{2}{3}$ „	1	5
3d do. 1 „	2	2
4th do. $1\frac{1}{4}$ „	2	8

4. The Consulting Engineer considered the Passenger Fares, though assimilating to those of the Bengal and Bombay lines, to be too high—they were higher than the rates on the English Railways, notwithstanding the great difference between the average cost at which the lines had been constructed in the two countries, and the difference of prices and in the value of money. He strongly urged that the people of this Presidency should be allowed the utmost possible benefit in the use of these highways, and consequently that the rates should be as moderate as practicable. Those he recommended were per mile:

	A.	P.
1st Class	1	6
2d do.	0	9
3d do.	0	4

Besides which he proposed to have a fourth class or slow train to travel with the goods train, at the rate $1\frac{1}{2}$ pie per mile to be calculated however in round numbers to the exclusion of fractional parts of an anna. Thus the charge would be for any distance

Under 8 miles	1 Anna.
Between 8 & 16 miles	2 do.
Between 16 & 24 miles	3 do.

5. Colonel Pears objected to the Goods Tariff proposed by the Railway Agent as too high, and needlessly complicated. He would have only one rate, viz. 8 pice per ton per mile, to be chargeable by weight or measurement according to the option of the Company. Parcels would form a separate charge, and so would Specie and the other more valuable articles noticed by the Agent.

6. Lastly Colonel Pears adverted to the standard of Weight which had been ordered by the Supreme Government for all Indian Railways, viz. the Indian maund of 40 Seers of 80 Tolahs—a weight not known

Plate,
Jewellery,
Watches,
Clocks, &c.

in this Presidency. He submitted that if it should be considered desirable to introduce the English avoirdupois scale, no better opportunity could be found than was now presented. One great advantage would be that the accounts and returns of the Indian Railways would be prepared in a form similar to that of all the railways in the United Kingdom and the Colonies, and not in weights unknown out of India.

7. Having given our best consideration to the observations of the Agent and of the Consulting Engineer, we observed that we were not disposed to object to the rates proposed by the Agent for the first and second Class passengers, which did not seem to us unreasonable nor higher than would be paid by the parties, European and Native, likely to travel in those classes. Neither could we quite agree with Colonel Pears that beginning with low fares, it would be easy to raise them afterwards. In the rate for the third class, the Agent and Consulting Engineer concurred.

8. We however entirely coincided in Colonel Pears' views of the propriety of having a slow train attached to the Goods train or running separately at the goods train pace, at very low rates, so as to give the benefit of the rail to the lowest orders and make its advantages felt as extensively as possible. We approved the rates proposed by the Consulting Engineer for the slow train as specified in para : 4 of this Despatch.

9. We also entirely concurred in Colonel Pears' proposal that (with certain exceptions to be charged at special rates) all goods should be carried at the same rate determined by weight or measurement at the choice of the Company. We approved also the rate recommended by him, or 8 pice per ton per mile. It appeared to us that the classification proposed by the Agent was complicated and inconvenient and such as could scarcely be carried out in practice.

10. It will thus be perceived that we were on the whole in favor of the passenger rates recommended by the Agent, but with a fourth or slow train class at a very low fare, and a single rate of charge 8 pice per ton for goods.

11. In submitting the reports of the Railway Agent and Consulting Engineer with our own views on the subject to the Government of India, we at the same time brought under their consideration the question adverted to by Colonel Pears in the concluding para : of his observations, viz : as to the system of Weights to be used on the Madras Railway, which was considered to be one of much importance. The Indian

maund, as Colonel Pears has remarked, is unknown in this Presidency.

Madras weights	Avoirdupois.			Troy.		
	lbs.	ozs.	drs.	lbs.	ozs.	dwt.
1 Tola	..	..	6.5822	..	..	7½
3 Tolas = 1 Pollams.	...	1	3.7489	...	1	2½
40 Pollams = 1 Viss	3	1	5.9422	3	9	..
8 Viss = 1 Maund.	24	10	15.5422	30	..	..

The Madras standard weights fixed by the Proclamation of 1846 are given in the margin. But these, though ordered to be employed in all Govern-

ment transactions, are by no means in general use among the people—the local weights and measures, as observed by Colonel Pears, differing all over the country in every District and almost in every Talook. The use of the English avoirdupois weights on the Railways would be attended with this advantage, that it would enable a comparison to be made between the English and Indian Railways—the return of each being drawn out in terms of a common standard. We at the same time observed to the Government of India that we should however greatly prefer the adoption of a system of weights and measures for all India, which, like that of France, should rest on a scientific basis and be adapted to the decimal scale—but that we were not insensible to the difficulties which beset the question.

12. The Consulting Engineer had further proposed in his communication of the 27th June 1855, para : 40, that the consideration of the rules forwarded by the Agent for the orders of Government should be postponed until the arrival of the Traffic Managers in this country, whose experience in these matters would prove of great assistance in the discussion of the subject.

13. We thought that the adoption of some of these Rules might be advantageously deferred, as suggested, but that there were others which, in order to ensure the convenience of the Public, required to be arranged at once. We observed that the conveyance of passengers' luggage by railroads in England was often attended with much inconvenience, delay, and confusion—and we were of opinion that all this might be obviated by system, regularity, and a little attention to the comforts of the passengers.

14. The Agent very properly proposed to require passengers to pay for their luggage, except any small parcel which could be placed under the seat of the Carriage occupied by the owner. He, however, at the same time seemed desirous of avoiding any responsibility on the part of the Railway Authorities for articles conveyed by them.

15. We remarked that on some of the continental railways the arrangements for the conveyance of luggage were very complete. Luggage was weighed, booked, and paid for, and was then placed entirely under the charge of the Railway Officers—the passenger saw no more of it until he arrived at the place of his destination, where on shewing his ticket which he received at the starting point and on which all his packages were described and numbered, they were returned to him.

16. Another great convenience for passengers, we observed, would be to provide a room in which they could leave any articles they might not desire to carry with them, a small payment being charged on that account.

17. The Agent appeared inclined to leave the delivery and even packing of goods to be undertaken, as a matter of accommodation to parties, by the Railway Company—and then it was to be performed by them or not as might happen to be convenient. We thought that no uncertain or indefinite course should be adopted on this point, and that the Railway Company should either undertake to do it positively or decline the work altogether.

18. We requested the Consulting Engineer to communicate these views to the Railway Agent.

19. In their letter of the 28th November 1855, the Government of India communicated their views and orders upon the scale of Fares and Rates for the Madras Railway.

20. For passenger fares they approved the scale proposed by Colonel Pears, which, they observed, was the same as that for the East Indian Railway, except that his 3d Class fare was higher by a third.

21. They also approved Colonel Pears' proposition for a 4th or slow train running with the goods trains, or at the goods trains pace and at $1\frac{1}{2}$ pie per passenger per mile, but did not agree with him that the payment should be in whole annas. They desired that "the fare table should be calculated to the nearest pice a small and uniform terminal charge being added."

22. For goods, the Bengal goods Tariff was to be adopted as a very proper one for a commencement, though it might hereafter be found profitable and therefore expedient to lower the first Class from $1\frac{1}{2}$ to 1 pie per maund per mile. The Tariff submitted by the Madras Railway Agent was thought too much subdivided and generally too high, and Colonel Pears' proposal to fix the rate for all goods at 8 pice per ton per mile was not approved.

23. For Carriages, dogs and live stock, it was observed by the Government of India that the rates that had been proposed by the Madras Agent were identical with those in force for Bengal, but it was intimated that these rates were under revision in Bengal, and a detail of the proposed rates was annexed.

24. The parcel Tariff proposed by the Madras Railway Agent was approved, and that proposed for the East Indian Railway was also given.

25. With respect to the remonstrance made by Colonel Pears regarding the standard of Weight to be used on the Railway, the Supreme Government furnished us with Copy of their reply to a similar reference from Bombay, explaining their views on the subject and observing that the prescribed standard must be adhered to.

26. The above letter from the Government of India was furnished to the Consulting Engineer, and he was requested to call upon the Railway Agent to submit a revised table of fares for passengers, goods, horses, dogs and parcels, according to the rates sanctioned by the Government of India, and also, after communication with the Traffic Manager, to submit a set of Rules and Regulations.

27. With his Memoir of the 19th February 1856 the Consulting Engineer forwarded a Report of the Traffic Manager received through the Railway Agent and concurred in by that Officer. The Traffic Manager objected to the passenger fares recommended by Colonel Pears and sanctioned by the Supreme Government, as too low, and submitted a scale of his own which agreed with that originally proposed by the Railway Agent for the two first Classes, but was higher for the third. The three scales were per mile.

Colonel Pears sanctioned by the Government of India.			Railway Agent.		Traffic Manager.	
	A.	P.	A.	P.	A.	P.
1st Class.....	1	6	2	...	2	...
2d do.....	...	9	1	...	1	...
3d do.....	...	4	...	4	...	6

28. To the fourth or slow Class, he objected altogether and entered upon an elaborate discussion of the evils of low fares.

29. For parcels, dogs, horses and carriages, the Traffic Manager submitted rates of his own, so also for cattle, sheep, goats and pigs. These he stated to be lower than those charged on the other Indian Lines.

30. For the goods he proposed four Classes :

	Per Ton.	Per Maund.
D.		
The first Class per mile 1½.....		.44 Pice.
Second.....do..... 2.....		.58 „
Third.....do..... 2½.....		.73 „
Fourth.....do..... 3.....		.88 „

Per Maund per Mile.	Bengal Tariff. Pic.
1st Class.....	¼ or .33
2d do.....	½ or .66
3d do.....	1 or 1.
No fourth class.	

This Tariff differed somewhat from the Bengal goods Tariff which had been ordered to be adopted, as being very proper for a commencement, being somewhat lower in the highest, and higher in the lowest class of goods.

31. All the Tables drawn up by the Traffic Manager were framed according to his own views of what the rates should be.

32. We observed that the Passenger fares and the goods and parcels tariff had been decided already by the Government of India, who had also determined that there should be a slow or goods train on the rate suggested by Colonel Pears and that the only rates they had left open to consideration were those for carriages, horses, dogs and live stock.

33. We expressed our doubt whether the Supreme Government would be disposed to reconsider their opinions in regard to Passenger fares or the slow Class train, and as we did not see the least occasion to re-open this part of the question, we desired the Consulting Engineer to call upon the Railway Agent to comply with the requisition made in our Proceedings of the 11th January 1856, by submitting a set of tables which, as regards passengers' fares (including the slow train) goods Tariff, and parcel Tariff, should be framed precisely on the rates for passengers, goods and parcels already sanctioned by the Government of India.

34. The rates for carriages, horses, dogs and live stock not having been settled, the Railway Agent was instructed that he might, if he saw fit, adopt those recommended by the Traffic Manager—and the Consulting Engineer was requested, in laying them before Government, to make upon them any comment that might seem to him to be called for.

35. Meanwhile we forwarded these reports to the Government of India for their information, and requested their particular attention to the remarks offered by Colonel Pears in the concluding Paras : of his very able Memoir on the proposed Goods tariff, especially to the acts, stated in paras : 129 and 130, that the charges to which all the chief articles of produce and traffic in this Presidency would be subjected by the proposed goods tariff were as high and in some cases much higher than those for which they could now be carried by common cart on a good road. The conclusion which Colonel Pears had drawn from these facts was in our opinion so inevitable that, reluctant as we were to re-agitate the question, we felt it nevertheless incumbent upon us to solicit its reconsideration and to express our hope that the low and uniform tariff for goods advocated by Colonel Pears might yet recommend itself to the approval of the Supreme Government as better adapted to the resources of this Presidency and to the condition of its people, than the more complicated and higher tariff which, doubtless, for very sufficient reasons, had been introduced in Bengal.

36. We further observed that the circumstance, that rates once fixed cannot apparently be changed authoritatively, except on a contingency not likely for a long time to be realized, rendered caution in their original determination doubly needful, and that this and the great importance of the question must be our apology for recurring to a subject on which the Supreme authority had already given a deliberate opinion.

37. In their reply of the 23d May last to this reference, the Government of India informed us that they were disposed to allow great weight to the arguments contained in the Consulting Engineer's Memoir, and that they considered that Colonel Pears had successfully demonstrated the fallacy of the arguments on which the Officers of the Madras Railway had based their proposals for a high scale of charges for the conveyance of passengers and goods, that they had hitherto desired to establish the lowest tariff on which a small margin of profit could fairly be expected, and were prepared to support this Government in following the same principle.

38. The scale of passenger fares, they remarked, might stand as approved in their letter of the 28th November 1855.

39. In regard to the Goods Tariff, they observed on the first of the questions involved in the reference : whether there shall be a graduated or an uniform goods tariff? that they were unable to modify materially the former decision of the Supreme Government—that neither the

cost of conveyance nor the insurance risk were the same on all descriptions of goods, and on this account alone it would be unjust to insist on a uniform charge. They however considered that it was not necessary to have more than three rates for goods.

40. With respect to the second question. To what point the charge may safely be lowered before the cost of working the traffic has been experimentally ascertained? they thought that the rate for the lowest class of goods might be fixed somewhat lower than the lowest in Bengal, which was $\frac{1}{3}$ d. of a pie per maund per mile. The distribution of goods under the 3 Classes, and the determination of rates for the higher Classes, they left to the judgment of this Government.

41. In reference to the opinion entertained by this Government that under the Contract between the East India Company and the Railway Companies, the tariff once authoritatively sanctioned could not be lowered until the net profit amounted to 10 per cent per annum on the Capital, they observed that the Tariff first adopted in Bengal was an "experimental" one, and was clearly understood to be so both by Government and by the Railway Officers, and they suggested that a similar course should be followed at Madras and that the tariff to be approved by this Government should be clearly stated to be an experimental one, subject to revision by Government after the expiration of one year.

42. We communicated the above letter to the Consulting Engineer and requested him, in communication with the Railway Agent, to prepare and submit for the consideration of Government, a goods table of three Classes, the rate for the lowest Class being somewhat lower than the lowest in Bengal.

	Per mile.
	A. P.
1st Class.....	1 6
2d do.....	0 9
3d do.....	0 4
Besides a slow or goods pace train.	

43. We at the same time observed that the scale of passengers' fares was to stand as sanctioned by the Supreme Government, and that the rates for horses, carriages, live stock, &c. had still to be submitted by the Railway authorities.

44. Under date the 12th ultimo we sanctioned the table of fares for passengers, (including that for the fourth or slow train Class) and that for parcels, horses, carriages, palankeens and dogs, as prepared by the Railway Agent, and submitted by the Consulting Engineer in accordance with the foregoing instructions; and desired that it should be distinctly understood that these rates were sanctioned only experimentally to be in force for the period of one year from the date of opening of the Line,

and that they would be subject to revision, should the Government desire it at the expiration of that time. We also approved the proposed Rules recommended by Colonel Pears in his communication of the 7th Ultimo.

45. We further desired that the Agent should be required to submit a revised table of Fares, No. 1, incorporating in it the rates for the fourth or slow train passenger class.

46. With his communication of the 21st ultimo, No. 123, the Consulting Engineer for Railways submitted a table of charges for goods, prepared in accordance with the instructions received from the Government of India and with suggestions made by himself to the Agent.

47. The rates for the three Classes were severally

	Per Indian Maund.	Per Ton.
First Class per mile	$\frac{1}{4}$ pie	6 $\frac{3}{4}$ pies. A. P.
Second Class do.....	$\frac{1}{2}$ „	1 1 $\frac{1}{2}$
Third Class do.....	$\frac{3}{4}$ „	1 8 $\frac{1}{4}$

48. Much of the cheap and bulky produce of the country, cotton, grain, salt, sugar, &c. was included in the first class.

49. It was thought by the Consulting Engineer that the reduction in the cost of transit under these rates, as compared with the present rates by common cart, was sufficient to ensure to the Railway a very considerable share of the present Traffic, and even to stimulate agricultural enterprise.

50. We sanctioned the goods rates thus proposed on the distinct understanding that they were to be experimental only, to be in force for one year from the opening of the Line, and to be subject to revision by Government at the expiration of that period.

51. With his second letter of the same date, No. 124, Col. Pears forwarded a Time table for goods trains. It was proposed that they should run East and West between Madras and Arcot on alternate days, leaving Madras at 9 A. M. on Mondays, Wednesdays and Fridays, and Arcot at 8 A. M. on Tuesdays, Thursdays and Saturdays. We approved of this proposal, and authorized the Railway Agent to adopt and publish the Table of Goods charges—and Time Table, Nos. 1 and 2, submitted by him.

52. The Consulting Engineer subsequently forwarded a letter from the Railway Agent, representing that he had not means and appliances

for working a 4th Class Passenger Train, and suggesting that the rate for that class should not be published for the present.

53. The Consulting Engineer pointed out that the representation of the Agent was not consistent with the opinion expressed by that Gentleman in his letter of 19th March last, when he proposed to run mixed trains on the ground that the number of passengers or weight of goods might not be sufficient at first to pay the expense of being separately run. He observed also that the 3rd class Carriages differed but slightly from those required for the 4th Class, and that the Cattle waggons would do well enough on an emergency for that class, and he submitted that if the stock should at first prove insufficient, there was no reason why one particular class of passengers should suffer more than the rest or more than the goods, and that each class of passengers and goods might fairly be expected to bear its share of the inconvenience resulting from present inadequacy of carriage accommodation.

54. In these views we expressed our entire concurrence, and therefore directed that the Agent should be required to make some arrangement in the third class carriages or cattle waggons which would enable fourth class passengers to travel at once. As the goods and slow class trains were to run only on alternate days, there appeared to us no reason to apprehend any difficulty in this.

55. Under this arrangement we authorized the line being opened for traffic as far as Arcot on the first Instant, from and after which date the provisions of Act. XVIII—1854 would be applicable to it.

56. We have since received—on the 25th ultimo—your Honorable Court's Despatch of the 21st May, No. 13 of 1856, forwarding copy of a correspondence with the Directors of the Madras Railway Company on the subject of the charges for the conveyance of Goods and Passengers which the Directors are desirous of adopting for the Railway at this Presidency.

57. The Proceedings now reported will acquaint your Honorable Court fully with the views entertained by us and the Government of India on the important questions discussed in this correspondence. We have now only to state that under the strong opinion expressed by the Railway Directors and concurred in by your Honorable Court, respecting the 4th Class or slow pace Passengers' Train, we have directed that its introduction be suspended until further orders, but that in all other respects the Tariff for Passengers and Goods sanctioned by us under this order of the Supreme Government experimentally should remain in full

We cannot however but trust that the papers now laid before your Honorable Court and especially the masterly Memoir of our Consulting Engineer may serve to remove the objections which have been entertained to the cheap and slow pace Passengers' train, and that we may speedily receive your authority for carrying out a measure without which the effects of the Madras Railway will in our opinion be but very imperfectly developed—and the benefits conferred by it fail to reach the mass of the people of this Presidency.

59. After the above paras: were written we received from our Consulting Engineer a further paper on the subject of the cheap and slow class train, a copy of which and of a Minute recorded by the Honorable Mr. Elliot in support of Colonel Pears' arguments, we transmit herewith, and beg to solicit for these documents the serious consideration of your Honorable Court.

60. We take this opportunity of adding that the Madras Railway was opened for Public Traffic on the first instant.

HARRIS,
PAT. GRANT,
WALTER ELLIOT,
H. C. MONTGOMERY.

Fort Saint George, 8th July 1856.

MINUTE BY THE HONORABLE W. ELLIOT, ESQ.

In support of Colonel Pears' arguments in favor of a low rate fare for a fourth Class train, I beg to cite the experience of the Rajah-mundry Inland Navigation Company which fell under my observation two years ago.

The fare for common foot passengers by the Company's Boats was originally fixed at 3 pie the mile, but it was soon found that persons of the lower class would not avail themselves of the means of transport offered by the Company's boats. It was therefore reduced to 2 pie with a little better success, but still not sufficient to draw many persons of the lowest class to travel by the boats. It was finally resolved to fix the fare at one pie the mile, and ever since the change was made the boats have been crowded.

The Managing Committee is composed of both Europeans and Natives.

The shareholders have divided as much as 30 per cent. and I believe the dividends at present are still higher.

The native manager told me a curious anecdote of the effect produced by the last reduction of fares.

On the day the measure was resolved upon, a party of about 40 weavers wishing to go from Rajahmundry to Cocanada, a distance of 45 miles, enquired the fare which was at first stated to them at the rate of two pie per mile. They at once determined to prosecute their journey on foot; but just then the news of the reduction to one pie having been made known, they changed their minds, took tickets at the reduced rate and embarked on board the canal boat.

The highest rate of an ordinary day laborer's wages is 2 Annas a day, which for 28 days gives $3\frac{1}{2}$ Rupees a month. But this is only to be earned where there is a demand for work and that is only the case near large towns or where great public undertakings are in progress. The common run of agricultural wages does not exceed one Anna a day or $1\frac{3}{4}$ Rupees a month.

If this be taken as the ratio of income of the great mass of the lower orders, it is clear that they can only avail themselves of the very cheapest description of carriage and that the Railway is entirely beyond their means.

WALTER ELLIOT.

APPENDIX A. MADRAS RAILWAY.

OPEN BETWEEN MADRAS AND ARCOT.

Time and Fare Table on and after Tuesday the 1st day of July, 1856.

Times shown in this Table are those at which the Trains are intended to the various Stations, but the Company cannot guarantee these Times under all circumstances, nor do they hold themselves responsible for delay. Passengers to insure being booked should be at the Stations 10 Minutes before time mentioned in the following Tables. The Doors of the Booking will be closed punctually at the hours mentioned in these Tables, after which no person can be admitted. Passengers cannot be re-booked at Roadside Stations after the Train in which they have arrived.

TRAINS WEST FROM MADRAS.

Stations.	Daily Train. First, Second, and Third Class.	Fares from Madras.																Goods Train. *						
		Passengers.						Horses.			Carriages.			Dogs										
		First Class.	Second Class.	Third Class.	One Horse.	If one Property.		Four Wheel.	Two Wheel or Palanquin.	Each.														
						2 Horses.	3 Horses.																	
Departure	P. M.	R.	A.	P.	R.	A.	P.	R.	A.	R.	A.	R.	A.	P.	R.	A.	A M.							
Fore,.....	3:30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9.0							
ore,.....	3:40	0	6	0	0	3	0	0	1	4							9.55							
ore,.....	4:7	1	3	6	0	9	9	0	4	4							10:30							
ore,.....	4:22	1	11	0	0	13	6	0	6	0							11.0							
unapet,.....	4:46	2	7	0	1	3	6	0	8	8							11.48							
nyper,.....	5:16	3	6	0	1	11	0	0	12	0							11.53							
ghur,.....	5:44	4	5	0	2	2	6	0	15	4							1.43							
Arrival.....	6:15	5	4	0	2	10	0	1	2	8							2.35							
	6:45	6	1	6	3	0	9	1	5	8	8	2	12	3	16	4	14	6	10	12	6	1	0	3:30

* Goods Train will run from Madras on Mondays, Wednesdays, and Fridays only.

TRAINS EAST TO MADRAS.

Stations.	Daily Train except Sunday. First, Second, & Third Class.	Fares from Arcot.																		Goods Trains.*					
		Passengers.						Horses.						Carriages.				Dogs							
		First Class.		Second Class.		Third Class.		One Horse.	If one Property.		Four Wheel.		Two Wheel or Palanquin.		Each.										
									2 Horses.	3 Horses.															
Departure	A. M.	R.	A.	P.	R.	A.	P.	R.	A.	P.	R.	A.	R.	A.	R.	A.	P.	R.	A.	A. M.					
ghur.....	5.30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.0					
ypet.....	5.57	0	15	0	0	7	6	0	3	4	...	...	...	...	...	...	...	...	0	8	8.55				
mapet.....	6.23	1	14	0	0	15	0	0	6	8	...	...	...	...	...	...	...	...	0	8	9.47				
mapet.....	6.57	2	11	6	1	5	9	0	9	8	...	...	...	...	...	...	...	...	0	8	10.37				
ore.....	7.28	3	12	0	1	14	0	0	13	4	...	...	...	...	...	...	...	...	0	8	11.42				
ore.....	7.51	4	6	6	2	3	3	0	15	8	...	...	...	...	...	...	...	...	0	12	12.30				
ore.....	8.6	4	14	0	2	7	0	1	1	4	...	...	...	...	...	...	...	...	0	12	1.0				
ore.....	8.35	5	13	0	2	14	6	1	4	8	...	...	...	...	...	...	...	...	1	0	1.0				
Arrival...	8.45	6	1	6	3	0	9	1	5	8	8	2	12	3	16	4	14	6	10	12	6	1	0	2.5	2.30

* The Goods Train will run from Arcot on Tuesdays, Thursdays, and Saturdays only.

PARCELS RATES.

WEIGHT.	DISTANCE.			DISTANCE.		
	50 Miles and under.			Exceeding 50 and less than 100 Miles.		
5 Seers and under.....	0	8	0	0	12	0
Exceeding 5 Seers and less than 20.....	0	12	0	1	2	0

Passengers will be booked and carried, subject to the Bye-Laws of the Company.

Tickets must be shown or delivered to any of the Company's Servants on demand; persons failing to do so are liable to be charged the fare from the Station from which the Train carrying them originally started, and if endeavouring to defraud the Company, they will be liable on conviction to a fine not exceeding Fifty Rupees.

Passengers' Luggage.—No free Luggage is allowed except such small Carpet bags or packages which can be placed under the seat of a Carriage and carried by the owner in his charge and at his risk; all other Luggage conveyed will be charged for at the rate of one-third of an Anna per Maund per mile, and the Company will not be responsible for any loss or damage that may occur to the following Articles if sent as Luggage or Parcels, namely, Plate, Bullion, Money, Bills, Notes or Securities, Jewellery, Trinkets or Watches, nor will they undertake to carry Luggage or Parcels containing Gunpowder, Vitriol, Aqua Fortis, Turpentine, Lucifer Matches, or such combustible Materials, except by special agreement.

Children.—Under 3 years of age travel free, and above that age, are charged full fares.

Parcels.—Not considered as goods are conveyed at the published rates, including Booking and delivery within a mile of the Station and within the limits of the Town of Madras so soon as arrangements can be made for the purpose.

Cloak Rooms.—Are provided at the Madras and Arcot Stations for the convenience of parties wishing to have their Luggage left there

for a short period, when it will be registered and a Ticket given in exchange which must be produced when the Luggage is required to be given up. Charge 6 Pie each article.

Ladies.—A Compartment in a first Class Carriage will be exclusively reserved.

Smoking is strictly prohibited in any of the Company's Carriages or Stations under a penalty not exceeding Twenty Rupees.

Special Trains, or Special accommodation in the ordinary Trains for parties or Ladies travelling, may be had on application to the Traffic Manager, Madras Terminus.

Fees.—The Company's Servants are forbidden under pain of dismissal from asking for or receiving from the Public any gratuity.

Complaints.—It is requested that any incivility or want of attention on the part of any of the Company's Servants may be reported to H. A. Fletcher, the Traffic Manager at the Madras Terminus.

Horses.—The lowest charge for sending a Horse will be Rupees 5.

Grooms.—One Groom in charge of each Horse will be allowed to travel free in the same vehicle as the animal. An Insurance rate of $2\frac{1}{2}$ per cent. will be charged on all Horses of the declared value of Rupees 400 or upwards, and a form of conditions under which the Railway Company undertake to carry Horses, must be signed by the sender or his Agent.

Carriages.—The lowest charge for sending a four-wheeled Carriage will be Rupees 5, and for sending a two-wheeled Carriage or Palanquin Rupees 4.

Horses, Carriages, or Palanquins should be at the Stations at least half an hour before departure of the Train by which they are intended to be despatched. A day's previous notice should be given in order to prevent disappointment.

Goods.—For the rates of Goods, see Goods Tables, which may be had at the Stations on the Line, or at the Company's Offices at Madras, and all further information required by the Public may be had from the Traffic Manager, Madras.

T. A. JENKINS,

Agent and Manager.

B.

MADRAS RAILWAY.

THE FOLLOWING RULES ARE PUBLISHED FOR GENERAL INFORMATION.

1. No Passenger will be allowed to take his seat in or upon any Carriage used on the Railway, without having paid his fare.
2. Passengers must show their Tickets to the Guard when required, and deliver them up to the persons authorized to receive them, before leaving the Station.
3. Passengers not producing or delivering up their Tickets will be required to pay the fare from the place whence the Train originally started.
4. Passengers at the Road Stations will only be booked conditionally upon there being room in the Carriages.
5. Every person attempting to defraud the Company by, in any manner, endeavouring to evade the payment of his full fare is, liable to a penalty of Fifty Rupees..... Rs 50
6. Any person attempting to get into or upon, or to quit any Carriage after the Train has been put in motion, is liable to a penalty of Twenty Rupees..... 20
7. Any person smoking in a Carriage or Station, is liable to a penalty of Twenty Rupees; and if after being warned any person shall persist in smoking, he will be liable, in addition to the penalty of Twenty Rupees, to removal from the premises and the forfeiture of his fare..... 20
8. Any person found intoxicated, committing a nuisance or wilfully interfering with the comfort of other Passengers, or obstructing any Officer of the Company, in the discharge of his duty, is liable to a penalty of Twenty Rupees, and to removal from the premises, and to forfeit his fare..... 20
9. Any Passenger wilfully damaging, or removing any Lamp, Number Plate, or any part of any Carriage, Waggon, Truck, or other property of the Railway Company, will be liable to a fine of Fifty Rupees..... 50

10. No person, unless duly authorized, will be permitted to ride on the Engine or Tender, under penalty of Twenty Rupees.... 20
11. No Male person shall enter a Carriage or waiting Room reserved for Females, under a penalty of one Hundred Rupees..... 100
12. Any person trespassing on the Railway, or on the Stations, or on any part of the Company's premises, will be liable to a fine of Twenty Rupees and to a further penalty of Fifty Rupees, for persisting, after due notice has been given..... } 20
50
13. Any person driving any Animal across the Railway, except at the appointed times and places, will be liable to a penalty of Fifty Rupees..... 50
14. The owner of Cattle found trespassing on any part of the Company's Premises, is liable to a penalty of Ten Rupees for each Animal..... 10
15. Any person carrying dangerous goods, without due notice and permission having been given, shall be liable to a fine of Two Hundred Rupees..... 200
16. The Officers and Servants of the Railway Company are required to enforce the strict observance of the above Rules, and are empowered, if necessary, to apprehend offenders.

T. A. JENKINS,

Agent and Manager.

Sanctioned by Government in Extract Minutes of Consultation, No. 180, dated 12th June 1856, in conformity with the Act of the Legislative Council, No. 18 of 1854, dated 12th August 1854, entitled "An Act relating to Railways in India."

T. T. PEARS,

Consulting Engineer for Railways.

Madras, 13th June 1856.

MADRAS RAILWAY.

TABLE OF CHARGES FOR THE CARRIAGE OF GOODS, CATTLE, &c.

The Public are requested to take notice that from the until further notice, Goods will be carried with despatch by the trains leaving Madras and Arcot every day, at the charges shown in this Table, and that the Railway Company will endeavour by every means in their power to prevent any loss or damage occurring to articles entrusted to their charge.

The Public are also requested when requiring any information not afforded in this Table, to apply to H. A. Fletcher, the Traffic Manager at Madras, or to the Station Masters at the stations along the line, whose duty it is to afford every information to the public, as well as to treat them with civility and attention, and should any cause of complaint arise, either from delay in the transmission of Goods, loss or injury to them or want of attention on the part of the Company's Servants to the senders or receivers of Goods, they are requested to report the same, either personally or in writing, addressed to the Traffic Manager, who will endeavour either to remove the cause of complaint, or obtain such redress for the complainant as may be required.

FIRST CLASS.

Bones for Manure,	Coke,	Returned Sacks or Sheets
Bricks,	Flags,	Salt,
Chalk,	Iron in Pigs,	Sand,
Casks or Cases empty,	Iron, Railway Bars,	Slates,
Charcoal,	Lime or Chunam,	Stone,
Clay, Loam or Earth,	Manure,	Tiles.
Coal,	Ores,	

First Class Goods will be conveyed from station to station at the rate of one-third of a pie per maund per mile, provided they do not measure more than 3 cubic feet per maund weight; if in excess of that limit, they will be charged by measurement, at the rate of one-third of a pie per mile for 3 cubic feet.

Consignment of First Class Goods, weighing 32 maunds or upwards, will be carried at the following rates, inclusive of Terminal charges, between the stations here named.

Madras to Arcot or *vice versa* 2 Annas and $\frac{1}{2}$ pie per maund—Madras to Trivellore or *vice versa* As. 0 11 $\frac{1}{2}$ pie per maund—Madras to Sholinghur or *vice versa* 1 Anna 9 $\frac{1}{2}$ pie per maund.

SECOND CLASS.

.....,	Hemp and Hempen	Paper Brown or coun-
Anchors;	ropes and Cordage,	try coarse,
Anvils,	Hides or skins undress-	Paun or Betel leaves,
Bamboos,	ed,	Pitch, Tar or Rosin in
Bark for Tanning,	Hams,	Casks,
Beans,	Iron, viz. Boilers, Tanks,	Potatoes,
Betelnuts,	Forgings or Plain	Potash,
Bitumen,	castings not exceeding	Rags,
Brooms or Brushes of	16 by 7 by 6 feet or	Rice,
country manufacture,	30 maunds weight.	Reeds,
Cannon Balls,	Wheels and Axles not	Saltpetre,
Chains,	exceeding 30 maunds	Seeds of all sorts, not
Cocoanuts and shells,	per pair, Bar, Rod	otherwise classified.
Coir or Coir Ropes,	Sheet plate, and hoop	Soap, country or com-
Cotton Raw,	Iron.	mon European,
Dammer,	Chairs, Bolts, Spikes,	Starch,
Dates,	Nails, and Screws,	Staves for Casks, Bar-
Dye wood,	Quarrying, agricultu-	rels, &c.
Fish Dried or Salt,	ral or mining Tools,	Sugar unrefined,
Flax or Tow,	Vices, Rivets, Wash-	Sugar and other canes,
Flour and Bran,	ers, &c.	Tallow or Lard in casks
Fruits Dried,	Jaggree,	or Tubs,
Furniture, viz. Country	Jute and Jute Yarn,	Timber unwrought or
made and not polish-	Lac and Lac Dye,	wrought into beams,
ed turned or carved,	Lead in Pigs,	plants or scantling, or
such as Charpoys or	Leaves dried,	into shovels, Hoe or
country bedsteads,	Leather, country or or-	Pick handles on agri-
common chairs, stools,	dinary European,	cultural or Contractors
tables or boxes,	Linseed,	implements, pannelled
Ghee in Barrels or Tubs	Marble in blocks not	doors, or windows
Gourds,	polished,	sashes, if packed in
Grain, Wheat, Barley,	Mats, Durmah or Floor,	cases and not damage-
Oates, Rye, &c.	common,	able will also be car-
Gram,	Molasses,	ried in this class.
Grind stone,	Nuts,	
Gum,	Ochre,	
Gunny cloths and bags,	Oil in Casks,	
Jay, Straw or materials	Onions,	
for Thatching,	Paints in Casks,	

Second Class Goods will be conveyed from station to station at the rate of half a pie per maund per mile, provided they do not measure more than 3 $\frac{1}{2}$ cubic feet per maund weight, if in excess of that limit they will be charged by measurement at the rate of half a pie per mile for 3 $\frac{1}{2}$ cubic feet.

Consignment of Second Class Goods weighing 32 maunds or upwards, will be carried at the following rates, inclusive of Terminal charges between the stations here named.

Madras to Arcot or *vice versa* 2 Annas 11½ pie per maund. Madras to Trivellore or *vice versa* 1 Anna 4 pie per maund. Madras to Sholinghur or *vice versa* 2 Annas 7 pie per maund.

THIRD CLASS.

Ale or Beer in Casks or Cases.	Hams, cured.	Paper, writing &c.
Bale or Piece Goods consisting of Cotton, Woollen or Flax.	Hardware and Ironmongery not otherwise classified.	Pepper.
Fabrics.	Hosiery, Cotton or Woollen.	Porter in casks or cases.
Bacon.	India Rubber.	Pottery, common.
Bellows.	Indigo and Indigoseeds.	Provisions, Salt.
Bottles Empty.	Iron in Castings or Forgings.	Quills.
Bread and Biscuits.	Boilers or Tanks exceeding the dimensions allowed in the second class, but not exceeding 25 by 7 by 6 feet or 45 Maunds weight.	Silk Raw.
Brushes European Manufacture.		Snuff.
Butter in Casks or Tubs.		Spirits, Brandy, Gin, Rum,
Canvass.		Arrack, Whiskey, &c. in wood.
Carpets.		Sugar, Refined.
Copperas.		Tents.
Cutch.		Thread, Cotton, Flax or Woollen.
Earthenware common.	Military Baggage not including gun powder or such explosive materials.	Tobacco.
Feathers.	Lead in Pipes or Sheets.	Turmeric,
Felt.	Machinery in pieces or cases not exceeding 25 by 7 by 6 feet or 45 Maunds weight.	Twist or Yarn, cotton or woollen.
Files.		Varnish.
Fruits common Country fresh.		Vegetables.
Furniture packed and not damageable.		Vinegar in wood or cases.
Ginger.		Wearing apparel, cotton, flax or woollen.
Groceries, heavy.	Opium.	Wine in wood.

Third Class Goods will be conveyed from Station to Station at the rate of two thirds of a pie per maund per mile, provided they do not measure more than 3½ Cubic feet per maund weight, if in excess of that limit they will be charged by measurement at the rate of two-thirds of a pie per mile for 3½ Cubic feet.

Consignments of Third class Goods weighing 32 Maunds or upward will be carried at the following rates, inclusive of Terminal charges, between the stations here named. Madras to Arcot or *vice versa* 3 Annas and 10 pie per Maund—Madras to Trivellore or *vice versa* 1 Anna and 10 pie per Maund—Madras to Sholinghur or *vice versa* 3 Annas and 4 pie per Maund.

FOURTH CLASS.

Books.	Furs.	otherwise classified.
Camphor.	Glass and Glass ware.	Perfumery, scented
Chinaware.	Grapes.	Soap, &c.
Chanks.	Guns and Pistols.	Shoes and Boots of European Manufacture.
Clocks, plain in wooden cases.	Hats and Caps.	Saddlery, Whips and Harness.
Cochineal.	Ivory.	Silk manufactured.
Confectionary and Sweetmeats.	Hosiery Silk.	Shawls.
Coral.	Lace.	Spirits in bottles and cases.
Cutlery.	Lead Pencils.	Spices not otherwise classified.
Drugs not otherwise classified.	Marbles polished or wrought.	Tea.
Eggs.	Musical Instruments.	Toys.
Elephants' Teeth.	Medicines not otherwise classified.	Turpentine.
Fish and Game.	Millinery.	Wax.
Furniture wrapped in Mats or cloth damageable.	Military Accoutrements, Swords, Bayonet, Pouches, &c.	Wine in bottles and Cases.
	Oilmans Stores not	

Fourth Class Goods will be conveyed from Station to Station at the rate of one pie per maund per mile provided they do not measure more than 4 cubic feet per maund weight, if in excess of that limit they will be charged by measurement at the rate of one pie per mile for 4 cubic feet.

Consignments of Fourth Class Goods weighing 32 maunds or upwards well be carried at the following rates—inclusive of Terminal charges between the stations here named, Madras to Arcot or *vice versa* 5 Annas and 8 pie per maund—Madras to Trivellore or *vice versa* 2 Annas and 5 pie per maund—Madras to Sholinghur or *vice versa* 4 Annas and 11 pie per maund.

FIFTH CLASS.

Bank Notes and Bills	Gold Lace or Thread.	Silver Lace or Thread.
Coins of Gold, Silver or Copper,	Jewelry or Trinkets.	Stamps or Securities.
Engravings.	Paintings or Drawings.	Stationery.
Gold in a manufactured or an unmanufactured state.	Plates and Plated ware.	Time Pieces, Ornamental.
	Silver in a manufactured or an unmanufactured state.	Watches.
		Writings.

Fifth Class Goods will be conveyed from Station to Station at the rate of two pies per maund per mile provided they do not measure more than 4 cubic feet per maund weight, if in excess of that limit they will

be charged by measurement, at the rate of two pies per mile of 4 cubic feet.

Note.—The rates specified for the conveyance of Goods in any Class do not include the extra charge which the Railway Company are authorized to make when accepting responsibility for Precious metals, Bank Notes, or Securities, Precious Stones, Jewelry, Trinkets, Glass, China or other valuable or brittle Articles, specified in Clause 10 of Act XVIII of 1854, Gunpowder, Lucifer and Congreve Matches, or similar articles of an explosive nature, will only be carried for the use of Government and under special agreement in boxes constructed specially for the purpose. Vitriol, Aqua Fortis and such dangerous articles will only be carried by special agreement.

TERMINAL RATES.

A Terminal charge of 8 Annas will be made on all consignments of Goods charged by weight and not exceeding 32 Maunds and the same amount will be charged on all consignments charged by measurement, and not exceeding the allowance equivalent in each class to 32 Maunds.

Consignments exceeding 32 Maunds weight or the equivalent measurement allowance in each class will be charged a Terminal rate of one quarter of an Anna per Maund or its equivalent measurement allowance

DEMURRAGE.

All Goods left in the Railway Company's Premises above 48 hours after their arrival, either for the convenience or by the desire or neglect of the Consignor or Consignee will be subject to a demurrage charge at the rate of 6 pie per Maund or its equivalent measurement per day.

CATTLE, PIGS, CALVES, SHEEP, GOATS, FOWLS, &c.

A Van or Waggon to carry any number of full grown cattle not exceeding 8, any number of Pigs or Calves not exceeding 30, or any number of Sheep or Goats not exceeding 40, will be charged for at the rate of 3 Annas per mile.

Full grown cattle sent singly will be charged for at the rate of 2 Annas per mile.

The lowest charge for a Van or Waggon or for single cattle will be Rupees 4.

Pigs, Calves, Sheep or Goats sent singly will be charged 8 Annas for any distance not exceeding 30 miles, 12 Annas for distances exceeding 30 miles.

ing 30 and not exceeding 50 miles, and one Rupee for any distance above 50 miles. Domestic Fowls when sent loosely will be charged at one fourth of the rates stated in this paragraph for the respective distances, and if sent in Hampers they will be charged at parcel rates by weight or measurement.

The Railway Company will not undertake to receive Goods, Live Stock, or Parcels on Sundays.

T. A. JENKINS,

Agent and Manager.

Not sanctioned.

MADRAS RAILWAY.

TABLE OF CHARGES FOR THE CARRIAGE OF GOODS, CATTLE, &c.

 The Maund alluded to herein is the Indian of 40 Seers equal to 82 2-7th lbs. Avoirdupois.

The Public are requested to take notice that from Tuesday, 1st July 1856, until further notice, Goods will be carried with despatch by the trains leaving Madras, on Mondays, Wednesdays, and Fridays, and Arcot, on Tuesdays, Thursdays, and Saturdays, at the charges shown in this Table, and that the Railway Company will endeavour by every means in their power to prevent any loss or damage occurring to articles entrusted to their charge.

The Public are also requested when requiring any information not afforded in this Table, to apply to H. A. Fletcher, the Traffic Manager at Madras, or to the Station Masters at the Stations along the line, whose duty it is to afford every information to the Public, as well as to treat them with civility and attention; and should any cause of complaint arise, either from delay in the transmission of Goods, loss or injury to them, or want of attention on the part of the Company's Servants to the senders or receivers of Goods, they are requested to report the same, either personally or in writing, addressed to the Traffic Manager, who will endeavour either to remove the cause of complaint, or obtain such redress for the complainant as may be required.

FIRST CLASS.

Anchor.	Grind Stones.	Salt.
Anvils.	Gunny Cloths and Bags.	Saltpetre.
Bamboos.	Hay, Straw or Materials for Thatching.	Sand.
Bark for Tanning.	Hemp and Hempen Rope and Cordage.	Seeds of all sorts not otherwise classified.
Bones for Manure.	Hides or Skins undressed.	Slates.
Bricks.	Horns.	Staves for Casks, Barrels, &c.
Chalk.	Iron in Pigs.	Stone.
Casks or Cases, Empty.	Iron Railway Bars.	Sugar unrefined.
Charcoal.	Jaggree.	Timber, unwrought or wrought into beams, planks or scantling or into Shovels, Hoe or Pick handles or Agricultural implements, pannelled Door or Window Sashes if packed in Cases and not damageable, will also be carried in this class.
Clay, Loam or Earth.	Jute and Jute Yarn.	Tiles.
Coal.	Leaves, dried.	
Cocoanut and Shells.	Lime or Chunam.	
Coir or Coir Ropes.	Linseed.	
Cotton, Raw.	Manure.	
Coke.	Mats, Durmah or Floor, Common.	
Dye Woods.	Oil in Casks.	
Earthenware, Common.	Ores.	
Fish, Dried or Salt.	Rags.	
Flags.	Rice.	
Ghee, in Barrels or Tubs.	Returned Sacks or Sheets.	
Gourds.		
Grain, Wheat, Barley, Oats.		
Gram.		

First Class Goods will be conveyed from Station to Station at the rate of one-fourth of a pie Per Bengal Maund per mile, provided they do not measure more than 3 Cubic feet per Maund weight; if in excess of that limit, they will be charged by measurement at the rate of one-fourth of a Pie per Mile for 3 Cubic feet.

Consignments of First Class Goods, weighing 32 Maunds or upwards, will be carried at the following rates, inclusive of Terminal Charges, between the Stations here named.

Madras to Trivellore or vice versa 10 Pie per Maund—Madras to Companypet or vice versa 1 Anna 3 Pie per Maund—Madras to Arcot or vice versa 1 Anna 7 Pie per Maund.

SECOND CLASS.

Alum.	try Bedsteads, common Chairs, Stools, Tables or Boxes.	Oilmen's Stores not otherwise classified.
Ale or Beer in Casks or Cases.	Groceries, heavy.	Onions.
Bale or Piece Goods consisting of Cotton, Woollen or Flax fabrics.	Gum.	Paints in Casks.
Bacon.	Hardware and Ironmongery not otherwise classified.	Paper, Brown or Country, coarse.
Beans.	Hosiery, Cotton or Woollen.	Paun or Betel leaves.
Bellows.	Iron, viz., Boilers, Tanks, Forgings or plain castings, not exceeding 16 by 7 by 6 feet or 30 maunds weight, Country manufacture.	Pitch; Tar or Resin in Casks.
Bottles, Empty.	maunds per pair and Bar Rod Sheet Plates and Hoop Iron, Chairs, Bolts, Spikes, Nails and Screws, Quarrying, Agricultural or Mining Tools, Vices, Rivets, Washers, &c.	Porter in Casks or Cases.
Betel Nuts.	Lead and Lac Dye.	Potatoes.
Bitumen.	Leather Country or ordinary European.	Potash.
Bread and Biscuits.	Marble in Blocks not polished.	Pottery, common.
Books.	Medicines not otherwise classified.	Provision, Salt.
Brooms or brushes of Country manufacture.	Molasses.	Reeds.
Butter in Casks or Tubs.	Nuts.	Soap, Country or common European.
Cannon Balls.	Ochre.	Spirits, Brandy, Gin, Rum, Arrack, Whisky, &c. in Woods.
Canvass.		Starch.
Carpets.		Sugar refined.
Chains.		Sugar and other Canes.
Dammer.		Tallow or Lard in Casks or Tubs.
Dates.		Tents.
Drugs not otherwise classified.		Thread, Cotton, Flax or Woollen.
Feathers.		Tobacco.
Felt.		Twist or Yarn, Cotton or Woollen.
Files.		Vegetables.
Eggs.		Vinegar in Wood or Cases.
Flax or Tow.		Wine in Wood.
Flour and Bran.		
Fruits, Dried.		
Furniture, viz., Country made not polished, turned or carved, such as Charpoys or Coun-		

Second Class Goods will be conveyed from Station to Station at the rate of half a Pie per Bengal maund per Mile, provided they do not measure more than $3\frac{1}{2}$ Cubic feet per Maund weight; if in excess of that limit, they will be charged by measurement, at the rate of half a Pie per Mile for $3\frac{1}{2}$ Cubic feet.

Consignments of Second Class Goods, weighing 32 Maunds or upwards, will be carried at the following rates, inclusive of Terminal Charges, between the Stations here named.

Madras to Trivellore or vice versa 1 Anna 4 Pie per Maund—Madras to Companypet or vice versa 2 Annas 2 Pie per Maund—Madras to Arcot or vice versa 3 Annas 0 Pie per Maund.

THIRD CLASS.

Brushes, European manufacture.	Wearing Apparel, Cotton, Flax or Woollen.	Shoes and Boots of European manufacture.
Copperas.	Camphor.	Saddlery, Whips, and Harness.
Cutch.	China Ware.	Silk manufactured.
Fruits, common Country, fresh.	Chanks.	Shawls.
Furniture packed and not damageable.	Clocks, plain, in Wooden cases.	Spirits in Bottles or Cases.
Ginger.	Cochineal.	Spices not otherwise classified.
Hams cured.	Confectionary and Sweetmeats.	Tea.
India Rubber.	Coral.	Toys.
Indigo and Indigo seed.	Cutlery.	Turpentine.
Iron in Castings, or Forgings, Boilers or Tanks, exceeding the dimensions allowed in the 2d Class but not exceeding 25 by 7 by 6 or 45 Maunds weight.	Elephants' Teeth.	Wax.
Military baggage not including Gun Powder or such explosive Materials.	Fish and Game.	Wine in bottles or cases.
Machinery in pieces or cases not exceeding 25 by 7 by 6 or 45 Maunds weight.	Furniture wrapped in Mats or Cloths and damageable.	Bank Notes and Bills.
Opium.	Furs.	Coins of Gold, Silver or Copper.
Paper, Writing, &c.	Glass and Glass Ware.	Engravings.
Pepper.	Grapes.	Gold in a manufactured or in an unmanufactured state.
Quills.	Guns and Pistols.	Gold Lace or Thread.
Silk, raw.	Hats and Caps.	Paintings or Drawings.
Snuff.	Ivory.	Plate and Plated Ware.
Turmeric.	Hosiery, Silk.	Silver in a manufactured or in an unmanufactured state.
Varnish.	Lace.	Silver Lace or Thread.
	Lead Pencils.	Stamps or Securities.
	Marble, polished or wrought.	Statuary.
	Musical Instruments.	Watches.
	Millinery.	Time Pieces, ornamental.
	Military Accoutrements, Swords, Bayonets, Pouches, &c.	Writings.
	Perfumery, scented Soaps, &c.	

Third Class Goods will be conveyed from Station to Station at the rate of three-fourths of a Pie per Bengal Maund per Mile, provided they do not measure more than $3\frac{1}{2}$ Cubic feet per Maund weight; if in excess of that limit, they will be charged by measurement, at the rate of three-fourths of a Pie per Mile for $3\frac{1}{2}$ Cubic feet.

Consignments of Third Class Goods, weighing 32 Maunds or upwards, will be carried at the following rates, inclusive of Terminal charges, between the Stations here named.

Madras to Trivellore or vice versa 1 Anna 11 Pie per Maund—Madras to Companypet or vice versa 3 Annas 2 Pie per Maund—Madras to Arcot or vice versa 4 Annas 4 Pie per Maund.

Note.—The rates specified for the conveyance of Goods in any Class do not include the extra charge which the Railway Company are authorized to make when accepting responsibility for Precious Metals, Bank Notes or Securities, Precious Stones, Jewellery, Trinkets, Glass, China, or other valuable or brittle articles, specified in Clause 10 of Act XVIII of 1854.

Gunpowder, Lucifer and Congreve Matches, or similar articles of an explosive nature, will only be carried for the use of Government, and under special agreement in boxes constructed specially for the purpose.

Vitriol, Aqua Fortis, and such dangerous articles, will only be carried by special agreement.

TERMINAL RATES.

A Terminal charge of 8 Annas will be made on all consignments of Goods charged by weight and not exceeding 32 Maunds, and the same amount will be charged on all consignments charged by measurement and not exceeding the allowance equivalent in each Class to 32 Maunds.

Consignments exceeding 32 Maunds weight or the equivalent measurement allowance in each Class will be charged a Terminal Rate of one-quarter of an Anna per Maund or its equivalent measurement allowance.

DEMURRAGE.

All Goods left on the Railway Company's Premises above 48 hours after their arrival, either for the convenience or by the desire or neglect of the consignor or consignee, will be subject to a demurrage charge at the rate of 6 Pie per Maund or its equivalent measurement per day.

CATTLE, PIGS, CALVES, SHEEP, GOATS, FOWLS, &c.

A Van or Waggon to carry any number of full grown Cattle not exceeding 8, any number of Pigs or Calves not exceeding 30, or any number of Sheep or Goats not exceeding 40, will be charged for at the rate of 3 Annas per Mile.

Full Grown Cattle sent singly will be charged for at the rate of 2 Annas per Mile.

The lowest charge for a Van or Waggon, or for single Cattle will be Rupees 4.

Pigs, Calves, Sheep or Goats, sent singly will be charged 8 Anna for any distance not exceeding 30 Miles, 12 Annas for distances exceeding 30 and not exceeding 50 Miles, and one Rupee for any distance above 50 Miles. Domestic Fowls, when sent loosely, will be charged at one-fourth of the rates stated in this paragraph for the respective distances, and if sent in Hampers they will be charged at parcel rates by weight or measurement.

The Railway Company will not undertake to receive Goods, Live Stock, or Parcels on Sundays.

By order.

T. A. JENKINS,

Agent and Manager

Madras, June 30th 1856.

Sanctioned in Extract Minutes of Consultation, 23rd June No. 191.—See page 127.

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CHAMBER OF COMMERCE,
MADRAS, 15TH AUGUST 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT.

Fort Saint George.

SIR,

1. The Chamber of Commerce have been favoured by Colonel Pears, the Consulting Engineer for Railways, with a copy of the Table of charges for the carriage of goods &c. with their classification, which has been sanctioned as an experimental measure for the Madras Railway; and have been requested by that officer to inform him of any omissions they may observe in the List.

2. On examination of the above Table there are several points which appear to the Chamber to require revision and modification; and I am therefore desirous to bring the same to the notice of the Right Honorable the Governor in Council.

3. The first subject that has attracted the attention of the Chamber is the classification of Goods, which in many respects appears to them an arbitrary one, especially as regards the second class, which comprises several articles of no greater (if of equal) value than those in the first class; whilst in one or two instances articles are included in the latter which properly should come under the former class; they would therefore respectfully recommend the following transfers.

From the 1st to the 2d Class.

Coir Ropes.

Hempen Ropes and Cordage.

From the 2d to the 1st Class.

Beans.
Bottles empty.
Brooms Country.
Chains.
Dammer.
Dates.
Flax or Tow.

Iron (all those articles enumerated.)
Lead in pegs and sheets.
Marble in blocks not polished.
Molasses.
Potatoes.
Sugar and other Canes.
Tallow.

The Chamber are of opinion that Coffee, which is not specially mentioned in the Tables, should come under this class, and that the words "European or China" should be added to Pottery common," also that "Feathers" should be transferred to the 3rd Class.

They further recommend that the words "in Wood and Bottle" be substituted for "in Casks and Cases" after "Ale or Beer" as being more explicit.

3rd Class.

"Brooms" to be included with "Brushes of European Manufacture," in this class.

The words "common country" to be omitted after "Fruits."

"Furniture packed and not damageable," to be struck out.

"Fancy" to be added to "China ware;" and "packed in Cases," to Furniture "wrapped in mats or Cloths and damageable."

Also that the following transfers be made.

Cutch.....	To 2nd Class.
Indigo seed.....	To 1st do.
Pepper.....	To 2nd do.
Wax.....	To do. do.

In suggesting these alterations the Chamber have had in view the relative value of the articles, and the use made thereof, and whether they are objects of luxury or common necessities.

4. The next subject to which the Chamber are desirous of drawing the attention of Government, is the standard of weight adopted by the Railway, viz. the "Indian Maund" of 82 lbs. 2 oz. 13 dwt. Although this is a point that has no doubt already engaged the consideration of Government, the Chamber deem it to be one of so much importance, that they trust they will be excused for submitting their views upon it. It is scarcely necessary to remark that among the natives throughout the whole of the Madras Presidency, the Bengal Maund is a weight that is almost entirely unknown, and no where made use of by them; neither is it one that is used by the European Merchants, or by Government, excepting in the levy of some of the Import and Export Duties. In all transactions whether between the Cultivators and the merchants, or the merchants and the Government, the English avoirdupois weight are universally made use of, and a subsequent conversion is made into the well known native standard weight of a Candy of 500 lbs. or a maund of 25 lbs. In introducing the Bengal maund as the standard of weight to be used on the Madras Railway, a very great amount of trouble and inconvenience is inflicted upon the Community who are likely to make use of the Rail; for throughout the whole of the contemplated line the weight is unknown. Besides this, the weight itself is an awkward and intrinsically inconvenient standard, involving in its conversion either into the local or English standard weights an intricate and troublesome calculation, alike irksome and tedious to the Public, as well as to the Railway officials. The Chamber would therefore desire to urge upon the Government to

endeavour to obtain a discontinuance of this objectionable standard, and the substitution for it of one more simple in its nature, and possessing more facilities for its easy adoption by the Community for whom it is intended. The Chamber would suggest 100 lbs. avoirdupois, as a substitute for the Indian maund. It possesses the recommendation of being understood by the natives, it is a multiple of their own maund of 25 lbs. and a fraction of their Candy of 500 lbs. It is, moreover, such a standard as will admit of easy adaptation to any general standard which may hereafter be adopted for the whole of the Indian Railways; for the Chamber are unwilling to believe it can be intended the latter should finally be fixed at lbs. 82, oz. 2, dwt. 13.

5. The last subject for notice is the cost of transit and the terminal charges. The Chamber understand that the latter item is a charge never levied in England on single lines but only where two or three lines of Rail are connected with; or cross each other, and that it is intended to cover moving and other petty charges at the several termini. Even then it is only a charge between the different Railways, and not exacted as a separate item from the public. They would therefore urge its abolition, and the adoption of a fixed rate for each class, to include all charges. The Chamber have recommended the transfer of a number of articles from the second to the first class, and to compensate for this, they are of opinion that the charge for the latter may be slightly increased. With regard to the second class, the nature and value of the articles, still left therein, approximate so closely to those of the first, that the Chamber cannot understand on what principle the charge upon them should be double;—they would therefore propose the substitution of the following rates for those in the Table, omitting entirely the terminal charges.

1st Class	half a pie	per 100 lbs.	per mile.
2d do.	three quarters of a	do.	do.
3d do.	one pie	per	do. do.

These rates appear to the Chamber to be just and fair, and such as will lead the traffic of the Districts through which the line runs, to the rail; an object as much to be desired by the Railway shareholders as by the Government.

6. A comparative statement is appended to this letter, shewing the present charges for transit of Goods per Country Carts and by the railway, and the proposed rate by the latter.

I have &c.,

J. B. KEY,

Chairman.

Comparative Statement of Charges for the Carriage of Goods per Country Cart and by the Railway.

	Railway Charges.		Average Rate of Cart hire.	Remarks.
	Present rate including Terminal charges.	Proposed Rate.		
	<i>First Class.</i>			
From Arcot to Madras,	1 8 2 2 1 10	3	0	The ordinary load of a Cart on the Western line being $2\frac{1}{2}$ Candles, in framing this statement 1,250 lbs. have been taken as the Cart load.
" Salem to Do.	4 8 6 6 5 6	10	0	
From Arcot to Madras,	2 13 9 3 2 9	3	0	
" Salem to Do.	8 9 3 9 8 3	10	0	
	<i>Third Class.</i>			
From Arcot to Madras,	4 2 1 4 3 8	3	0	
" Salem to Do.	12 6 3 12 11 0	10	0	

(A True Copy) J. B. KEY,
Chairman.

No. 262.

Ordered to be forwarded for the remarks of the Consulting Engineer for Railways.

T. PYCROFT,
Chief Secretary.

Fort St. George, 20th August 1856.

RAILWAY DEPARTMENT,
CONSULTING ENGINEER'S OFFICE.

No. 185.

FROM LIEUTENANT COLONEL T. T. PEARS, C. B.,

Consulting Engineer for Railways.

To T. PYCROFT, ESQUIRE,

Chief Secretary to Government Fort St. George.

SIR,

I have the honor to acknowledge the receipt of an order of Government No. 262, in the Financial (Railway) Department dated 20th August forwarding for my remarks a letter from the Chamber of Commerce on the subject of the Railway Goods Tariff.

2. The observations of the Chamber appear to refer mainly to three points.

1st. The classification of Goods.

2d. The "weight" used on the Railway.

3d. The rates.

3. With regard to the 1st point—classification—the Chamber observe that it appears to them an arbitrary one. I believe this is generally and necessarily the case, to some extent.

4. The practice of thus classifying goods, for the purpose of instituting a varying scale of charge for their conveyance, does, in fact, involve the exercise, on the part of a Railway Company, of two distinct powers; the one being to exact payment for work done, the other to levy a tax on the most valuable descriptions of goods.

5. In both respects the arrangement is necessarily somewhat arbitrary.

6. It would be impossible to levy a charge on each description of goods exactly proportioned to the expense which the Company incurs in its conveyance; and though an ad valorem tax might indeed be levied with something like accuracy, the right of Companies to levy such, though they do it in practice, has never been sufficiently recognized to admit of their professedly framing their tables upon such a system.

7. In the present case, the goods table was in the 1st instance submitted by the Agent, exhibiting a division of goods into five classes; the fifth comprising articles to be carried under special agreement.

8. Under instructions from the Government of India, the number of classes was reduced to three; and a table thus modified was suggested to the Agent, and submitted by him for sanction without observations.

9. My chief care, in preparing and recommending to the Agent this classification, was to bring into the cheapest class all such articles of raw produce as were susceptible of increase under the stimulus of cheap transport, and were, at the same time, not of a nature to put the Company to any extraordinary charge in their transport.

10. As an example of the mode in which it appears to be the practice to classify goods, it will be observed, in the table first submitted by the Agent, that "Indigo" is placed in the fourth class—Sugar in the second—the one being charged 50 per cent. more than the other. Both are carried in waggons of like construction. Their transport, weight for weight, costs therefore precisely the same. The great difference in charge must therefore either be intended to cover insurance—the risk being very small indeed, and the responsibility of the Company not in all cases quite clear—or it is a mere ad valorem tax levied on the articles.

11. Looking at the variety, and often fluctuating value, of many of the articles enumerated in the list, it will be seen how impossible it is to classify them in many cases otherwise than in a somewhat arbitrary manner.

12. In suggesting a few changes in the present classification, the Chamber observe that they have had in view the relative value of the articles, and the use made thereof; and whether they are objects of luxury or common necessaries.

13. In considering this very complicated subject, then, the Chamber have it seems, wholly lost sight of the relative charge to the Company arising from the expense of loading and unloading, which has no necessary connexion with any of these; nor do they appear in treating of this subject—or of the scale of charges hereafter—to have kept in view the interests of the people at large, or the expediency of stimulating production in the staples of the country by carrying these at the lowest possible rate.

14. The circumstance that an article is an object of luxury can have nothing to do with the matter; unless, as I have already suggested, the charges are regulated in some measure on a principle of taxation. The changes proposed by the Chamber under this head are few, and not very important; and I would suggest that they be not lost sight of when the subject of the rates and fares comes again under consideration.

15. The next subject noticed by the Chamber is the weight used on the Railway—the Indian maund. Government are aware that in a former report I advocated the introduction of the Avoirdupois weight, chiefly on two grounds.

1st. Its convenience to all connected with the management of English Railways.

2dly. The degree in which its use on the Railways would promote, if such were desired, its ultimate introduction into all commercial transactions throughout the country.

16. The Government of India disapproved of this: and ordered the Indian maund.

17. It being thus decided that English weight shall not be introduced, and that some Indian weight shall, I confess I cannot see why one weight—considering how many and various are those now in use throughout our Indian Empire—should not do as well as another.

18. Its use on the Railways must soon familiarize the people with it.

19. The objection that the maund is not an exact multiple of the Avoirdupois pound must, of necessity, apply to any weight that is not in fact—though it may be under another name—a member of the Avoirdupois table: and the Chamber while objecting to the introduction of the Indian maund because its equivalent is lbs. 82, oz. 2, dwt. 13, propose to substitute 100 lbs. Avoirdupois, one of their reasons being that it is a multiple of the maund of this Presidency, which (though

Fort St. George Gazette October 20th 1846.

there are more than one) they set down at 25 lbs; whereas it will be found, on reference, to be lbs. 24 oz. 10 dwt. $15 \cdot 54 = 30$ lbs.

Troy—it is not an Avoirdupois weight at all.

20. The last subject noticed by the Chamber is the rates of charge for goods.

21. The opinions expressed by the Chamber coincide very nearly with those given on a former occasion by Mr. Fletcher the Traffic Manager, and being given here without any argument, calculation, or apparent reason, further than that they appear just, and fair, it does not seem necessary that I should trouble Government with any repetition of arguments which I have already submitted in favor of a lower rate of charges than those proposed by Mr. Fletcher or the Chamber.

22. I may observe however here that the latter body talk of the rates leading on to the rail the traffic of the Districts through which the line runs; but it must do much more than that; it must draw it in far and wide.

23. They annex a table showing a comparison between their proposed rates and the present bandy hire, a table in which the calculations and results are wholly vitiated by their assuming, that a cart carries only 1,250 lbs. whereas on the made roads it is well known, among those who have been in the habit of enquiring into such matters, that even now, with any thing but lively competition, they frequently carry up to 17 and 18 hundred pounds.

24. Making the calculations on this basis, it will be found that in the 2d and 3d classes, according to the Chamber's proposal, the bandies on the road would beat the rail easily: and that with the first class there would be very little margin of difference left to compensate for the cost of bringing the goods to the rail.

25. In fact the Chamber have fallen into the too common error of making their calculations as if they had to consider only such goods as were found by the rail "in situ" as it were; forgetting the wide sweep of the country which the influence of the rail must take, if it is to do any good for its proprietors, or to the country at large.

26. Further, it appears by their vague expression of their proposed rate being "fair," that they have not considered well, the real effect of such a scale of charges upon the people at large, or upon this or that article of produce and consumption. The question is, not only is it fair—the present bandy hire is that—but is there any

thing like a wise liberality in thus narrowing the influence and the usefulness of these great works.

27. Will these higher rates exercise as great an influence on the growth of sugar, and the consumption of salt as lower rates will; and will they bring to the rail as large an amount of profitable business? The Chamber do not seem to have considered the subject in this the most important point of view.

28. As regards their objection to the Terminal charge, I am aware that this though proposed by the Agent, is objected to by the Traffic Manager.

29. I confess I did not attach to it the importance that in so short a line as this now opened it merited.

30. The principle however of levying a terminal charge is quite sound. It is one mode—and a very simple one—of raising the mileage charge upon short distances. It might be reduced; but I would not propose any change for the present. If it were now taken off altogether it would lower the rate already in the opinion of the Railway Authorities too low.

31. I am satisfied myself that the rates might yet be reduced—but the Government have resolved that the present rates shall be experimental for one year; and I would suggest that no alteration be made in the meanwhile.

I have &c.,

T. T. PEARS,

Consulting Engineer for Railways.

Jamp Ootacamund, 24th September 1856.

FINANCIAL RAILWAY DEPARTMENT.

No. 340.

Extract from the Minutes of Consultation, under date 11th October 1856.

Read again letter from the Chamber of Commerce dated 15th and recorded in Diary to Consultation 26th August 1856.

Read also letter from the Consulting Engineer for Railways:

(Dated 24th September 1856 No. 185.)

The Right Honorable the Governor in Council resolves to communicate the foregoing remarks of the Consulting Engineer to the Chamber of Commerce with reference to their letter of the 15th August last,

Extract Minutes of Consultation
23d June 1856 No. 191.

and to intimate to them that the present Goods rates were sanctioned on the understanding that they were to be experimental only—to be in force for one year from the opening of the line and to be subject to revision by Government at the expiration of that period—and that the changes proposed by the Chamber in the classification of Goods will be kept in view when the subject of the Rates and Fares comes again under the consideration of Government.

In the meanwhile they consider that no change should be made either in the classification or the rates of charge for Goods.

2. The Government entirely concur with Colonel Pears in the views expressed by him in paras 25, 26, 27 of his letter.

T. PYCROFT;
Chief Secretary

MADRAS RAILWAY,
21st AUGUST 1856.

No. 546.

FROM MAJOR T. A. JENKINS,
Agent and Manager.

TO LIEUT. COL. T. T. PEARS, C. B.,
Consulting Engineer for Railways.

SIR,

1. In obedience to the instructions conveyed to me in a letter from the Board of Directors of this Company, No. 84, dated 30th May last, I have the honor to solicit the attention of the Government to correspondence which has passed between the Board and the Honorable Court of Directors, relative to the Tariff of Rates and Fares to be adopted by this Company, which the Government and yourself are doubtless in possession of.

2. The Rates and Fares therein adverted to are those which I have the honor to submit with my letter, No. 137, dated 2d May 1855, with the exception that the Fare for 3d Class Passengers should be fixed at 5 pie per mile in lieu of 6 pie per mile. In the goods tariff alluded to I beg to state that the rate was made at so much per mile, including all charges.

3. The Honorable Court concur in the opinion expressed by the Directors of this Company that the chief object to be kept in mind is the establishment of remunerative rates: and in determining upon the scale of charges the Court express the opinion that it is very desirable that such rates should be adopted at the opening of a line, as might admit of reduction hereafter, if found expedient, it being more convenient and satisfactory in their opinion to lower a fare than to raise it.

4. I have therefore to request that you will have the goodness to move the Government to authorize the adoption by this Company, of the scale of Rates and Fares proposed by the Board of Directors, and which appear to the Honorable Court to be founded upon a safe basis and to be reasonable.

I have &c.,
T. A. JENKINS,
Agent and Manager.

Submitted (with observations) for the orders of Government.

T. T. PEARS,
Consulting Engineer for Railways.

Camp Ootacamund, 26th September 1856.

TO T. PYCROFT, ESQUIRE,
Chief Secretary to Government, Fort Saint George.

RAILWAY DEPARTMENT,
CONSULTING ENGINEER'S OFFICE.

No. 435.

FROM LIEUTENANT COLONEL T. T. PEARS, C. B.,
Consulting Engineer for Railways.

TO MAJOR T. A. JENKINS,
Agent and Manager of the Madras Railway Company.

SIR,

Referring to your letter No. 546, of the 21st August, I have the honor to request I may be informed of the Nos. and dates of the several letters to which you allude, as having passed between the Honorable Court of Directors and the Railway Board.

From the Directors of the Madras Railway Company to the Honorable Court No. 382, dated 10th April 1856.
From the Honorable Court to the Directors of the Madras Railway Company 21st May 1856.

2. The order of Government No. 199 dated the 5th June last, copy of which was forwarded to you on the 26th idem, had reference to a late correspondence between those two Authorities, the latter being dated as shewn in the margin.

3. Should this be the correspondence to which you refer and should you wish the Government to re-consider that order, your letter shall be forwarded without further delay.

I have &c.,

(Signed) T. T. PEARS,

Consulting Engineer for Railways.

Camp Seremoogay, 8th September 1856.

(True Copy.)

T. T. PEARS,

Consulting Engineer for Railways.

MADRAS RAILWAY,
16TH SEPTEMBER 1856.

No. 607.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

TO LIEUT. COL. T. T. PEARS, C. B.,

Consulting Engineer for Railways.

SIR,

With reference to your letter, No. 435, dated the 8th instant, I have the honor to state that the correspondence adverted to in my letter No. 546, dated the 21st ultimo, was the letter from the Board of Directors of this Company to my address, No. 84, dated the 30th May; received by me on the 9th ultimo: letter from the Board of Directors to the address of Sir James Melvill, K. C. B. No. 382, dated the 10th of April; and the reply thereto from the Honorable Court dated the 21st of May; and this is the only correspondence that has taken place to the best of my knowledge, as the order of Government No. 199 dated 25th (not 5th June as stated in your letter) did not specify any particular correspondence. I beg to repeat that it is in conformity with the in-

structions of the Board, and as authorized by the Court of Directors, that the subject is again submitted; and I have therefore to request that you will have the goodness to forward the same for the consideration of the Government.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Submitted (with observations) for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

Camp Ootacamund, 26th September 1856.

To T. PYCROFT, ESQUIRE,

Chief Secretary to Government, Fort Saint George.

No. 188.

On letters; (Nos. 546, and 607,) from the Agent and Manager of the Madras Railway Company, dated 21st August and 16th September 1856.

OBSERVATIONS BY THE CONSULTING ENGINEER.

The Agent, in the former of these letters, requested that a certain scale of charges for Passengers and Goods, approved of by the Board of Directors, and the Honorable Court, might be adopted in lieu of that sanctioned by Government in a late order. He was informed that the correspondence to which he referred, between the Honorable Court and the Board of Directors, was before the Government when that order was passed; and in reply, it will be observed, he requests the Government to reconsider the subject.

No. 607.

2. The Authorities in England, on recording their sentiments on this subject, were not aware of the correspondence that had taken place here, or of the decision at which the Government had arrived on the subject. I would recommend that no change be now made, until further instructions shall have been received.

3. The Agent doubtless considers it his duty thus to urge the carrying out of the wishes of the Board of Directors. If, however, he has studied to any purpose the working of the Railway during the short time that it has been opened, he cannot fail to see the disastrous consequences that would probably follow an increase of charges, which have not yet shown sufficient attractive force to lead to the rail any but a small portion of the goods on the western road.

T. T. PEARS,

Consulting Engineer for Railways.

Camp Ootacamund, 26th September 1856.

To T. PYCROFT, Esquire,

Chief Secretary to Government, Fort Saint George.

FINANCIAL RAILWAY DEPARTMENT.

No. 335.

Extract from the Minutes of Consultation, under date 7th October 1856.

Read observations of the Consulting Engineer on letters from the Agent and Manager of the Railway Company.

(Dated 26th September 1856, No. 188.)

In communicating to the Consulting Engineer, under date the 20th ultimo, the Honorable Court's Despatch No. 18 of 1856 and the letter addressed by the Directors of the Railway Company to their Agent at Madras on the 30th May last No. 84, regarding the Rates and Fares to be adopted for the Madras Railway, it was intimated that the whole correspondence on the subject had already been brought under the consideration of the Honorable Court in a Despatch dated the 8th July No. 9 of 1856. It will therefore be sufficient to remark, on the present communications from the Railway Agent, submitted by Colonel Pears, that, pending the receipt of orders on the above reference, no change can be introduced in the scale of charges now in force, and that the Government concur in the concluding observation of the Consulting Engineer.

T. PYCROFT,

Chief Secretary.

MADRAS RAILWAY,
MADRAS, 6TH DECEMBER 1856.

No. 892.

FROM MAJOR T. A. JENKINS,

Agent and Manager.

To LIEUTENANT COLONEL T. T. PEARS, c. B.,

Consulting Engineer for Railways.

SIR,

With reference to your letter No. 534, dated 23d October last, I have now the honor to annex copy of a letter from the Traffic Manager of this Company No. 337, dated the 14th of October, giving his opinion upon the various points adverted to by you in your observations to the Government upon the Rates and Fares to be adopted upon this Railway, prepared by him for the information of the Board of Directors of this Company.

I have &c.,

T. A. JENKINS,

Agent and Manager.

Madras, 15th December 1856.

Submitted (with observations) for the orders of Government.

T. T. PEARS,

Consulting Engineer for Railways.

To THE CHIEF SECRETARY TO GOVERNMENT,

Fort St. George.

MADRAS RAILWAY
TRAFFIC MANAGER'S OFFICE,
14TH OCTOBER 1856.

No. 337.

FROM H. A. FLETCHER, Esq.,

Traffic Manager.

To MAJOR T. A. JENKINS,

Agent and Manager Madras Railway.

SIR,

From Consulting Engineer No. 297, dated 7th June 1856, and Extract from Minutes of Consultation No. 166, dated 5th June 1856.

1. Referring to your letter, No. 66, of the 11th June with its enclosures as per margin, I have the honor to inform you that on the 20th June last, by the permission of Govern-

ment, a copy was obtained of the memoir submitted to Government by the Consulting Engineer for Railways dated 19th February 1856.

2. I beg to direct your attention to para 1 of the letter, No. 2322, of the Secretary to the Government of India in which Colonel Pears' memoir is mentioned, and to para 2 which states "His Lordship in Council considers that Colonel Pears has successfully demonstrated the fallacy of the arguments on which the Officers of the Madras Railway have based their proposals for a high scale of charges for the conveyance of Passengers and Goods."

3. I have had the honor to submit to you by my letter, No. 111, of the 21st June last, as requested, my opinion in full upon the Rates and Fares as ordered by the Government to be adopted upon this Railway; I shall therefore confine myself to the consideration of the "observations by the Consulting Engineer on a letter from the Agent and Manager of the Madras Railway Company No. 17, dated 5th January 1856." "Submitting, with reference to an order of Government as

Extract Minutes of Consultation (Financial) Railway Department No. 193, dated 10th August 1855.

"per margin, a report from Mr. Fletcher the Traffic Manager of the Madras Railway Company upon the subject of the Rates and Fares to be adopted upon their Line."

4. I propose to consider the various matters treated by Colonel Pears, and which I think constitute the whole of his letter, under 3 different heads, quoting the paras of the letter as I proceed.

First. The "few observations on points which according to Col. Pears have been, some wholly, all more or less, disregarded by me."

Secondly. The observations of Colonel Pears upon such arguments as were adduced by me in support of moderate rates for this Railway as per my letter, No. 35 of the 29th December last.

Thirdly. The theory advanced by Colonel Pears of low fares for the masses.

5. With reference to the first point viz. the few observations on points which according to Colonel Pears have been some, wholly, all more or less disregarded by me,

6. The great difference that exists between England and India, as a field for Railway enterprise, could scarcely be overlooked by any man anxious upon the subject of Railway success here; and I think that the fact of my having introduced into my report the consideration of some of the Irish Railways; and of the Waterford and Kilkenny Line in particular, proves that I was most mindful upon this subject. The manu-

facturing districts of England are doubtless "characterized by industry, wealth, intelligence, and energy of the highest order"; but there are many districts, even in that highly favored country, through which main Trunk Lines pass that are not so characterized. Amongst others the East Anglian and Southampton and Dorchester may be instanced; and the analogy between such Railways in England and those constructing in India would be in favor of the Indian Lines as possessing greater elements of success.

7. It should be borne in mind that the Railways constructed and constructing in India have immediate connection with the three capitals of the Presidencies, running through districts that have long been known as great highways for Traffic, great highways fed from vast tracts of country "densely populated and producing all that could administer to the support, the comfort or the luxury of life" concentrating in each case a vast whole, to one common mart, the capital.

8. The vast difference, spoken of by Colonel Pears, between Railways in England and in India to a great extent disappears, when the vast, almost boundless, extent of a producing country is thrown into the scale and weighed against the comparatively small extent of country which the greatest of the main Trunk Lines of England can command.

9. Any one of the main Trunk Lines of India commands an area exceeding the whole of Great Britain and Ireland in extent, populated by millions, cultivating one of the most fruitful and productive countries in the world. With such considerations I cannot concur with Col. Pears that Railways laid down under such circumstances can be properly considered as a "ploughing" and not a "reaping."

10. In Madras, it could not escape the observation of the most casual observer, that a large Traffic exists and has existed for a considerable period of time upon the western road—a trade which for long or short distances will eventually be transferred from the road to the Railway; nor could it be supposed that so large a trade in merchandize could exist without a passenger Traffic in some degree corresponding with its magnitude. The present trade upon the western road proves that the road has long been ploughing, although doubtless the Railway will develop still further the capabilities of the country to produce increased Traffic in a corresponding degree with other primary Trunk Lines which have developed a Traffic never supposed to exist; for even the "urgent pressing demand" they came to meet is small in proportion with the power and capabilities for Traffic which every country has proved itself

capable of producing, and which the Railways have been the means of developing.

11. If we consider, first, the large Traffic now existing in the district through which the Madras Railway passes, and secondly, be guided by the actual development of Traffic which has resulted upon other Lines as a guide for assumed increase upon this, we cannot arrive at Col. Pears' conclusions that this Railway comes "to create a demand", though it may increase it; and that it is not quite correct to describe its position as "ploughing" to "reaping" in the sense intended by Colonel Pears.

12. In support of these views I beg leave to refer you to an able and interesting pamphlet reprinted from the Journal of the Statistical Society being "the External commerce of British India during two periods of years namely the eight years (ended 30th April) 1834-35 to 1841-42 and the five years 1849-50 to 1853-54 by Colonel Sykes "F. R. S." The writer sets out by saying "at a period when the ancestors of the present mighty English people were painted Savages, and the thinly spread population of Western Europe were in but a little more advanced condition, India was densely peopled, civilised, advanced in the arts, and producing all that could administer to the support, the comfort, or the luxury of life." Colonel Sykes proves that there is a large export and import trade from the 3 Presidencies of India. The following extracts from the pamphlet, speak for themselves as to the extent and increase of this trade.

"Period of eight years 1834-35 to 1841-42. With these preliminary observations I shall proceed from official Tables to demonstrate the amount of the Commerce of India without entering into the details of these Tables which will be reserved for those of a more recent date, it will suffice to state that the exports from Bengal increased from 4,519,812£ in 1834-35 to 8,440,880£ in 1841-42 or 86.76 per Cent; of Madras from 1,669,133£ to 2,556,072£ or 53.16 per Cent and of Bombay from 3,485,783£ to 5,323,904£ or 52.73 per Cent in the same periods.

"The total exports of the three Presidencies increased from 9,674,728£ to 16,020,857£ or 65.59 per Cent.

"The imports into Bengal (exclusive of Bullion) increased from 2,192,557£ in 1834-35 to 4,677,387£ in 1841-42 or 113.33 per Cent; into Madras from 977,195£ to 1,052,469£ or 7.70 per Cent, and into Bombay from 2,713,555£ to 3,914,628£ or 44.26 per Cent in the same period.

"The Nett import of Bullion into Bengal rose from 579,660£ in 1834-35 to 1,178,438£ in 1841-42. The net Bullion imports and exports of Madras were of a comparatively limited character; the net imports in 1834-35 amounted only to 46,637£, rose the next year to 81,231£, but in 1838-39 fell to 39,896£ and in the three following years the net export of Bullion exceeded the import, and in 1841-42 amounted to 1,12,920£. At Bombay on the contrary, as at Bengal there was an annual net excess of Bullion imported. In 1834-35 the net excess amounted to 1,144,770£ and 1841-42 to 650,189£."

"The total results of these eight years for all India were as follows.

"The total imports, inclusive of Bullion rose from 7,654,485£ in 1834-35 to 11,473,113£ in 1841-42 or 49.88 per Cent. The total exports inclusive of Bullion rose from 9,674,728£ in 1834-35 to 16,020,857£ in 1841-42 or 65.59 per Cent, consequently the excess of exports or, in other words the balance of trade in favor of India rose from 2,020,242£ in 1834-35 to 454,744£ in 1841-42 or 125.10 per Cent. These eight year's trade Statements do not include the value of Military Stores sent to India for the service of Government, and averaging 292,115£ per annum.

"The aggregate of the value of the trade for these eight years was, Goods imported 61,211,044£, of Goods exported 108,052,293£.

"Period of Five years 1849-50 to 1853-54. The export of produce from Bengal independently of treasure amounted in the years 1849-50 to 10,148,038£, in 1853-54 to 10,133,303£, from Madras the exports rose from 1,272,884£ to 1,963,020£ in 1853-54, or 54 per Cent, and from Bombay from 5,891,376£ to 7,198,816£ or 22 per Cent. The total exports of produce from India to all parts of the world increased from 17,312,299£ in 1848-49 to 19,295,140£ in 1853-54 or 11.45 per Cent and the aggregate total amount of exports of Merchandize during those five years was 95,115,476£.

"The imports in Bengal exclusive of treasure rose from 5,283,170£ in 1849-50 to 5,673,366£ in 1853-54 or 7.38 per Cent, shewing a very small increased demand for foreign products. The imports did rise in 1851-52 to more than seven million, yet the very next year they fell to five millions and since the year 1845 the previously rapid annual increase of the import trade had ceased with exceptional years, although the export trade had increased nearly three quarters of a million.

"The Imports into Madras in 1849-50 were 906,004£, in 1853-54 they had slightly risen to 956,377£ or 5.55 per Cent.

"In Bombay the imports were 4,110,713£ and they rose to 4,492,914£ or 9.29 per Cent.

"The total amount of the import Goods trade into India in 1849-50 was 10,299,888£ and in 1853-54 it was 11,122,658£ an increase of 7.98 per Cent., but as it had risen to 12½ millions in 1851-52 an annual average would shew that the import trade had been nearly stationary. The aggregate total value of the imports in these five years was 55,292,688£ leaving a balance of trade in Merchandise in favor of India during the eight years of the preceding period.

"The net import into the three presidencies in 1849-50 was 2,425,565£ in 1850-51—3,270,519£, in 1851-52—4,132,970£, in 1852-53—5,776,149£ and in 1853-54 it was 3,388,662£ and the total amount of Bullion in these five years was, 18,993,865£ leaving a balance of trade in favor of India still unpaid of 20,829,923£.

Under the head of Statements of results Colonel Sykes observes that; "This state of the external commerce of India, suggests the reflections, that the Industry of India is so active, and its products so much in demand, and its foreign wants comparatively so limited, that a large part of its products must be paid for in Bullion, &c."

13. It is not necessary for my purpose to make further extracts from this invaluable resume—of the trade of India. I would beg to observe that the trade spoken of concentrates at three points Calcutta, Madras and Bombay. The Railways also concentrate at these points—A large trade is proved to exist it is also proved that it is an increasing trade. May we not assume that there is something more than the comparative of "ploughing" to "reaping"? for Railways situated as the three Lines under construction are, and running from the Capitals the three presidencies and something more to be hoped for than the mark of having "to do with a people just emerging from a general condition of poverty and degradation" could lead us to expect.

Second point para 9.

14. Here Colonel Pears points to two distinct parties as interest in the Railway. "First the General public and the Government" and "secondly the shareholders." He admits, however, that it is allowed to be an essential condition that all such public works should be self supporting i.e. pay fair interest on "the cost of construction and the working expenses."

15. I submit that if those measures are pursued best calculated to insure this "essential"—that the interests of the people, the Government and the shareholders will have been cared for, and the interests of all concerned will have become identical—But in the next para. Colonel Pears asks, whether "this fair interest can be expected in such a Country as this at once"? or whether those who have invested Capital must not wait until the Railway has "created a demand": and again that "Railway Companies have no right to expect in such a country as this an immediate payment of high dividends on their shares. If so why require a guarantee? The object of the guarantee was to obtain for the Country better or cheaper transit. If the Government once give up its control over the Railways, before this great end has been accomplished, the public money and credit will have been misappropriated."

16. There appears much ambiguity in all this. It is admitted as an essential that the Railway shall be self-supporting, shall pay "fair interest on the Capital": then we are told that it cannot be expected in such a Country as this—that the object of the guarantee was to provide "better or cheaper transit for the Country."

17. I submit that the Railway has come to meet "a demand": that there is a Traffic sufficient to pay fair interest "and to make the Railway self-supporting."

18. The great good which Railways had accomplished in Europe was a sufficient motive for their introduction into India. To accomplish this the East India Company guaranteed 5 per cent certain upon the Capital with a probability of 10 per cent according to the following provisions in the contract entered into between the Honorable Company and the Madras Railway Company, viz. "that such fares or tolls shall, when such receipts, as are hereinafter mentioned, shall, in any year have exceeded ten per cent upon the outlay, be reduced in accordance with any requisition of the East India Company in that behalf; but only with a view of limiting the said fares and tolls so far that the net receipts shall not exceed ten per cent as aforesaid."

19. We must not lose sight, however, of the fact that unless the Railway is self-supporting so far as to pay working expenses, the loss would be deducted from the guaranteed interest of 5 per cent.

20. Whatever the object of Government was in introducing Railways into this country, it appears clear that strong inducements were held out to capitalists to take up Indian Railway shares. If the only object was to obtain for the country better or cheaper transit it should in com-

mon fairness have been stated in the contract to what extent this should be carried. Railways have most undoubtedly performed wonders in reducing rates for transport of men and things. The Railways here would do the same thing to the extent it has done on the continent of Europe and in the United Kingdom—but the shareholders of Indian lines could never contemplate, could never foresee, that the Government of the country could possibly dictate a scale of rates and charges which all experience, all theory, and practice elsewhere tells us could never pay the guaranteed Interest, 5 per cent. leaving out of question the higher dividend of 10 per cent supposed to be realizable from the working of Indian lines—rendering it in short doubtful whether the working expenses could be paid. With the experience of the working of the Bengal Railway with its dividends of $1\frac{1}{2}$, 2, and $2\frac{1}{2}$ per cent, and the Bombay line with its dividends respectively of £3.16 £1.19 and £1.35 per cent, could it have been foreseen that Government here would endeavour to adopt a scale of charges lower than those which had not reached the essential point of paying fair interest on the capital invested?

21. Is it then the opinion of Colonel Pears, I would ask, that the public money and credit will have been misappropriated unless passengers are carried at $1\frac{1}{2}$ pie permile or 64 miles for 8 annas equal to 1 shilling and goods at equally fabulous rates? I would venture to ask whether the public credit is not at stake in carrying out the contract in its integrity, and in leaving to the Railway Company a voice in arranging so important a matter as the Tariff. This point is most assuredly one that has neither been wholly, more or less, or altogether, disregarded by me: but I have endeavoured to look at the question without bias, and with two objects in view. First, that whilst the great end which Railways are calculated to accomplish in this country may be attained on the one hand, that, secondly, the integrity of Government may be maintained towards the proprietors of the Railways on the other.

Third point para 11.

22. I concur in the views herein laid down by Colonel Pears generally; but this most assuredly is a point I have never lost sight of. The important question is what are the rates, which will command maximum amount of profit from the largest amount of work. Colonel Pears says “it is impossible to find out except by experiment” and “the charges should be such as to throw the Railway open to the large masses.”

23. I think it is right to consider to what extent it is proposed to adopt the theory that the large masses of the people can travel, or will

require to travel, and with what result. Colonel Pears says “we know” however that as the numbers of each class in every country increase “in a rapidly progressive ratio, as we descend in the scale of wealth till “we get near the bottom, the charges must be such as to throw the Railway open to these large masses.” My opinion, derived from practice, is that as we descend, after certain limits, in the scale of wealth we find fewer people to travel; and if we speculate upon the advantages, likely to accrue, or the motive that the large masses, which become greater, as we descend in the scale, have for travelling, we are lost to conjecture how far they would avail themselves of any mode of transit, however low the charge.

24. Railways generally are found to prosper or to fail in proportion as the districts through which they pass are rich or poor: the lowest tariff has failed to attract the poor in poor districts, whilst in the richer is found a proportionately remunerative Traffic. In this para lies the whole gist of Colonel Pears’ argument; but there is nothing new in the fact that the numbers of each class in every country increase in a rapidly progressive ratio as we descend in the scale of wealth—but there is something new in the theory that in proportion as we descend in the scale of wealth the numbers who would travel increase. I differ decidedly from Colonel Pears in this theory, and I think that the theory; would altogether fail to produce any sound or satisfactory result. I think that the moderate Tariff I proposed for adoption on this Railway proves that this point was not in any degree overlooked by me.

Fourth point para 12.

25. I concur generally in the views put forth in the 4th point but it is one which has not been overlooked. It must however be borne in mind that there are certain limits which cannot be passed with advantage to a Railway Company, and that it is necessary to keep within such limits—the point to be considered is what are those limits, and herein, as mentioned in the last para, lies to a great extent the point at issue—these limits form a subject for serious thought, and will be considered in subsequent paras of this letter.

Fifth point para 13.

26. It is scarcely possible for any one not to know that high fares and low fares are relative terms and that a charge may be found too low in England, and too high in India. I beg however to observe that the fares I had the honor to propose in my letter, No. 35, of the 29th December were in my opinion moderate fares, they would be considered low in

England—some of them very low—whilst Col. Pears considers them throughout his letter as high fares. The rates and fares proposed by Colonel Pears would be called very low upon any Railway and such as could not pay—the terms therefore of high and low fares may be said to be relative terms.

Lastly para 14.

27. All admit that a high charge does not necessarily give large profits; we all know that the terms high and low fares are relative terms. Lardner in considering this subject page 286 of his Railway economy says, "It is evident that by lowering the Tariff the quantity of traffic "as well as the average distances, will be augmented and this increase "will go on even if we were to carry the diminution of the Tariff to "the extreme length of extinguishing it altogether, and transporting "the traffic gratuitously, but at this imaginary limit the receipts would "be nothing."

"On the contrary if the Tariff be augmented continually the quantity of traffic, as well as the average distance it is to be carried, will "be continually diminished, the magnitude of the charge being such as "a less and less quantity of traffic is capable of bearing, a limit will at "length be attained, at which the traffic will altogether vanish, the "Tariff becoming so great that no objects can bear it. Here again the "receipts become nothing."

"Thus it appears that at the two limits of a vanishing Tariff and "prohibitory Tariff the receipts are nothing. Between these the gross "receipts vary, augmenting as the Tariff is diminished from its prohibitory amount to a certain point, and after passing that point, diminishing until they vanish altogether with the Tariff."

"With a vanishing Tariff the traffic is a maximum, but the receipts altogether vanish; with a prohibitory Tariff both the traffic and receipts vanish."

"The problem which the Railway Manager has to solve for each description of Traffic is the discovery of the point at which the gross receipts are a maximum. It is to adjust the Tariff so nicely that the influence of its gradual increase in diminishing the receipts shall be precisely balanced by the influence of the traffic in augmenting them."

"But it is not enough to consider the influence of these circumstances on the receipts, it is necessary also, to have regard to the expenses for it is on the excess of the receipts above the expenses that the commercial prosperity of the enterprise will depend."

28. To work out this problem, this question of a complicated character to advantage, experience shews, that it is not advisable to commence with a Tariff too high nor yet too low, and that the best Tariff is a moderate one, affording an easy opportunity, without violent change, either to raise or lower the rates, so that the scale of rates and charges, which will give the greatest amount of work to realize the same profits, may be arrived at with certainty.

29. Colonel Pears describes this important subject as "of a most complicated character and can only be solved by careful experiment" I think we should consider what constitutes "careful experiment." Can care be said to be exercised when all practice in that country where Railways most prevail is rejected? when the result of careful experiments is given and thrown aside as having been conducted without sound principles? when a scale of rates and fares is proposed and acted upon deduced from no practical test? with no stronger recommendation than theory and which practical men believe can never attain any satisfactory result? Careful experiment would consist rather in a slight modification of known and tried principles, than in a violent departure from all precedent.

30. In paras 15 and 16 Colonel Pears says.

"The expenses depend in a measure on the quantity of work, but increase by no means in direct proportion to the amount of that work." This is quite true up to certain limits, and is easily understood. All men at all acquainted with the working of Railways know that there are certain expenses that are fixed and become arbitrary, such as Direction and Management, maintenance of Permanent way, Station master-salaries, &c. and in short that there must be a staff of a certain strength. Up to certain limits of work this staff will remain unchanged and become changeable upon the Trains or upon the units of Traffic. Thus if 10 Trains be run upon a Railway of equal mileage the cost of such fixed and arbitrary charges become divisible over 10 Trains; but if 1 Train only were run it must be charged to that one Train another way would be to divide such expenses over the units of Traffic the same remarks apply in either case. There are expenses which depend (beyond the limits above named) upon the amount of work to be done—thus if more Trains are run—more goods conveyed, the expenses must increase in proportion as the amount of work done increases, and the expenses would be added to the arbitrary charges, and become together divisible over the units of Traffic—thus there is an amount of expenditure fixed and absolute, and a variable expenditure which changes with the amount

of work done. There is therefore a minimum amount of expenditure to be incurred to work even the smallest Traffic. The expenditure will afterwards increase as the Traffic increases until the minimum amount of expenditure becomes almost lost in the increased charges affected by the increase of Traffic, and the one will very nearly increase in the same ratio as the other. Lardner in speaking of the "expenses" in his Railway economy gives my meaning to some extent where he says "we find while the share of these expenses (direction and management) chargeable per mile on each vehicle on the Belgian Lines was nearly $\frac{1}{2}$ d. (one half penny) the share chargeable on vehicles per mile on the north western lines was less than $\frac{1}{8}$ d. (one eighth of a penny.)" Thus we find that in consequence of increased work the arbitrary charge of direction and management was greatly decreased. We may assume in the case of the Belgian Railways that they were working to their maximum of arbitrary expenditure with a small Traffic, whilst the London and north western saturated with Traffic had attained to a maximum, or nearly so, of work—the latter had therefore probably arrived at that point of working, when the arbitrary charges become small in proportion to the general charges, and were verging close to that state when an increase in the Traffic caused a corresponding and direct increased expenditure in proportions well understood.

31. Paras 17 and 18. In these paras Colonel Pears informs us that in turning "to the report of the Railway Companies in England we find no data whatever that helps us one step" and that Lardner complains in like manner. From this we might be lead to suppose that Railways in England have been conducted at random, upon no sound principle, and that "sound speculation" has never entered the minds of those entrusted with their management. I differ from Colonel Pears in these views of English Railway management, they have been conducted, as regards their business as carriers, with great care upon sound commercial principles and with judicious and therefore "sound speculation." The want, if it ever existed, of statistical returns, complained of by Col. Pears, was supplied years ago. The most minute data as basis for calculation were to be seen ten years ago, and these returns had been made for many previous years. These returns shewed the cost of conveyance of each unit of Traffic, and the mode of attaining it, and the system, plan, or principle adopted in dividing the expenses over the units of Traffic. Various scales of experimental rates have been charged upon Railways and it was found that rates may be too high or too low and judicious speculation has fixed the present Tariff of the different Rail-

ways. I believe that every Tariff upon the Railways of the United Kingdom has been the result of careful experiment and sound speculation and I believe that every Railway has its history and its figures illustrating, and proving, that the rates charged were those which theory and practise pointed out as the best under all circumstances. Doctor Lardner would have had no cause to complain of want of sufficient data, if he had been practicably at work upon Railways, however much he may have failed in eliciting the desired information from others.

32. Paras 19, 20, 21, 22, 23. In these paras Colonel Pears reviews Mr. Belpair's work upon the Belgian Railways. I would beg to observe that as far as I can see there is nothing new in the principles here cited. All Railway men will cordially agree in the following para 21 "Generally I would premise that a Railway is not economically worked when the Rails are frequently idle (costing interest) when the servants are frequently idle (wasting salary) when the Engines are not worked up to their power (wasting fuel) wear of Rail and interest on stock, when the Carriages are not filled (wasting do.)"

33. Paras 22, 23. Gives a curious calculation based on actual results. It is made to appear how much the conveyance of each unit (passenger or ton) may be cheapened by increasing the amount of work. The total cost per myrameter for a 3rd Class Passenger would be reduced from Franc 0.270 = 3.4 pie per mile to Franc 0.079 = 1 pie per mile. The same calculation applies to Goods. These important results according to Mr. Belpair or Colonel Pears would be attained by lowering fares. I differ from their views--no provision appears to be made for increased expenditure.

34. 100,000 Carriages propelled in trains of 12 carriages each with 20 passengers carried 5 myrameter each is to cost no more than 30,000 carriages propelled in trains of 5 carriages each, with 12 passengers carried 2 myrameters.

35. It will be seen how much is assumed for the sake of the argument.

First it is assumed that the increase of traffic would be as 100 to 30 upon the number of carriages run, that each train would consist, working economically, of 12 carriages instead of 6, that the same class of Engine, working to the same power, would be employed to hand 6 carriages or 12, that the passenger traffic would be so regular, and the increase so systematic, as to enable the Company to carry 20 passengers in each carriage instead of 12, and that the increased number of travellers

would require on an average to be carried 5 myriameters instead of 2 myriameters. I really don't know how assumption could be further carried. I would beg to ask whether the actual result upon which this calculation is based, proceeded from a bona fide experiment of reduction of fares, and consequent increase in the units to be carried, or was it a mere calculation assuming the basis? nothing is easier than to assume first that if the fare is made so and so, that a large number equivalent to so and so, would offer themselves for conveyance, in such number as to give a greater number of passengers per carriage, and to be carried on increased distance, but these assumptions, speaking generally, are unsafe for a commercial undertaking. The interests at stake are too important.

36. I beg now to offer some observations upon the second point of my letter viz.

The observations of Col. Pears upon such arguments as were adduced by me in support of moderate rates for this Railway as per my letter, No. 35, of the 29th December last.

37. Colonel Pears' remarks upon an experiment tried with reference to low fares upon the London and South Western Railway in such a way as to lead me to suppose that he did not understand my meaning, "for he says "as far as I can understand, it appears to have been made "upon no sound principles whatever. It seems to have consisted in jumbling up third class carriages intended for the poor, with first and second "classes intended for the rich, and expensive carriages intended for the "higher classes, with parliamentary trains intended for the poor" and "further "that it does not seem to furnish any argument one way or "the other on the question of high and low fares.

38. The principles upon which this experiment was made whether sounds or not, was, to demonstrate practicably whether increased facilities offered to the poor, could be advantageously carried into effect, it was tried for 6 months immediately after the passing of the Act. for providing the poor with covered carriages at the rate of one penny per mile. As time is considered to be money in England, the trial was made by increasing the number of third class trains, running them at the speed hitherto attained by 1st and 2d class trains, to effect this with economy third class carriages were added to those trains which previously had first and second class carriages only attached;—the result was as stated in my letter. It was considered a liberal experiment: and I have no hesitation in so describing it, and must beg altogether to differ from the conclusion which Col. Pears has drawn from it.

39. It was evident that the first and second class passengers decreased as the third increased, and the number of the latter did not increase in any commensurate degree with the liberality of the experiment, and it became evident that the south-western exceeded the limit to which they could reduce their fares. The experiment doubtless did fail in a financial point of view; and I submit to you that it should teach a lesson of great caution to all engaged in Railway Traffic Management.

40. The conclusion however which Col. Pears arrives at is, that the fares were prohibitory, in which, it is almost needless to say, that it is impossible any one practically acquainted with the circumstances can concur.

41. Col. Pears next speaks of the experiment tried upon the Waterford and Kilkenny line and says "whereon it seems they first tried "what are considered low fares" I beg to repeat what these fares were.

First class, $1\frac{3}{4}d.$ per mile equivalent to 1 anna 1 pie.

Second „ $1\frac{1}{4}d.$ „ „ to $8\frac{1}{2}$ „

third class $\frac{1}{2}d.$ per mile equivalent to 4 pie: return tickets were issued at one fare and a half for all these classes, i. e. the third class was equivalent to 3 pie per mile; surely these may fairly be considered low fares. These fares were in force for 2 years from June 1848 to May 1850, the working of the line was afterwards placed in the hands of a contractor Mr. Burke for 6 months from May to October 1850 inclusive. Mr. Burke ran trains at much lower rates (I believe equally as low as those advocated by Col. Pears,) the effect was more ruinous still, Mr. Burke tried the experiment of raising the fares; the result was satisfactory, as described by me, and every increase in the fares gave an increased receipt. The experiments on this line were of a different character to those tried on the London and South Western Railway. There no reduction in the actual rates was made, but increased facilities were afforded enabling the public to avail themselves of the lowest rates; but upon the Waterford and Kilkenny line the fares were very nearly those which Colonel Pears would adopt for Indian Railways, yet both cases alike were according to his view "unsound in principle" or "made without "reference to any principle beyond that of making each individual pay "more for his seat."

42. I leave you to judge whether strict impartiality, or the spirit of earnest and anxious enquiring, into a question so important and complicated, warrants these two experiments being so designated, or mentioned with so evident a desire not to entertain the lessons they teach.

I will merely observe, "that the bare statement" of the course pursued on the occasion is strictly correct; and you may safely receive it as truth; and I sincerely trust it will meet with all the attention which so important an experiment, so much to the point, deserves.

43. In para 33, Colonel Pears again draws attention to his theory that the masses will travel if the charge is only placed within their means. The rate however in Ireland was surely sufficiently low, 3 pie a mile for return tickets, and it was tried for two years, lower rates tried for a short period, and yet the experiments failed in a financial point of view.

44. Paras 34, 35. The very low rates at which Excursion Trains were run in the United Kingdom at a charge of 2 pie a mile has attracted Colonel Pears' particular attention, and he "calls the attention of Government to this very important statement" and these Trains although "cheap prove convincingly to his mind that the Traffic arrangements on the English Railways are not as a rule conducted upon sound principles or upon any sufficient and distinct data." "Either the Company made a profit upon each individual passenger after receiving from him at the rate of one farthing a mile, and my apprehensions of the injurious effects of low fares are unfounded; or else these Excursion Trains have not paid and the calculations regarding them have been made up from false or insufficient data."

45. I beg to call your particular attention to what I also said but which Colonel Pears does not quote. "The Trains (Excursion Trains) in all cases have been run with a studious care not to interfere with the receipts of the ordinary Traffic; hence, only Sundays, Holidays, Races, Fairs, and such occasions as would be most likely to attract large numbers, are made available for Excursion Trains. Experience proved that in cases where Trains were advertised on ordinary days of business, to run at low fares, that the passenger Traffic fell off for a day or two previous to the day upon which the cheap Train was to run, and for a day or two after, and that therefore in most cases, the amount gained by cheap Trains was more than lost in the reduction in the regular and ordinary Traffic."

46. Colonel Pears assumes that Excursion Traffic if carried every day upon a Railway would pay. I must beg to say that it would not; as an addition to, and not interfering with, the ordinary Traffic, it is successful; but if it should supercede the regular and paying Traffic in other classes, a loss, and not a profit would be the inevitable result. It should be borne in mind that Excursion Traffic is unlike the ordinary Traffic in one essential and most important particular. It goes and returns at a

certain fixed time, and invariably with full loads each way, whereas ordinary Traffic comes and goes at pleasure, varying to such an extent that an ordinary advertised Train may, at any scale of fares, run one day at a profit, from the large numbers carried, and another day at a loss from the small number carried. The uncertainty attendant upon the changes of ordinary Traffic are very great; one day an Engine may be attached capable of hauling 20 carriages, and not five may be filled; the next day an Engine, capable of hauling 10 carriages may be attached, and a sufficient number of passengers may present themselves to fill 20 carriages. On one day there may be a large number of passengers to be picked up at the road stations: on another day comparatively few. On one day there may be a large number to be dropped at intermediate stations, and on another very few; but it is totally different with an Excursion Train where no room is vacant, generally no picking up, or dropping at Road Stations, and no more Locomotive power used, than is necessary to propel it. Lardner speaking of this says. "A Field for the exercise of managerial skill is presented by the prevalence on the Railway of a large amount of empty transport and incomplete loads."

47. I cannot see the force of the conclusions Colonel Pears would draw from this Traffic; for it appears to me self evident that Excursion Traffic pays because it is run upon holidays, at low fares, when large masses are enabled to travel by being freed from their daily labours, supplying a Traffic totally different from the ordinary Traffic, at rates, calculated to attract such disengaged masses, but which are not applicable to the ordinary passengers Traffic; as it would soon be demonstrated that masses of people could not be found every day to fill the daily trains to the extent that characterize the holiday Excursion Trains; and that under any scale of rates and fares however low, the variations incidental to all ordinary Traffic, would soon upset the theory, that full loads with no waste of carriage room and Locomotive power was obtainable.

48. Para 37. Colonel Pears next reviews my remarks upon the Traffic of the Great Indian Peninsular Company, and the comparison I drew between the working of that Railway and the Great Southern and Western Companies of Ireland. In taking "the returns of the Great Indian Peninsular Railway during three distinct periods," it should be borne in mind that I took them from the opening of that Railway on the 18th April 1853, up to the period to which the returns had then been furnished, viz. up to the end of December 1854, that is for the period of time the line had been open for Traffic. Colonel Pears first says that I have failed to notice three very important circumstances.

"First that the weekly receipts on the grass were steadily increasing." I beg to observe that I distinctly quoted three different periods shewing the number of Passengers of each Class, and receipts of each Class, and subdivided each period into weeks, where by any increase or decrease in the Traffic of any Class could at once be seen.

49. How far I failed to notice the steady "increase" may be gathered from the following quotations from my letter.

"The gross receipts have been as follows :

" Periods—from 18th April to 31st December 1853.	Rs...	2,421 2 0
" Second half year from Dec. 1853, to June 1854.	„	2,528 3 2
" Third „ from June 1854, to Dec. 1854.	„	2,687 3 8

50. I will, however, especially notice now, that there was an increase on the average during the second half year over the first period of Rs. 107-1-2 per week, and a further increase in the third half year over the second of Rs. 159-0-6 per week, and an increase in the last periods over the first of Rs. 266-1-8 per week. I submit to you that the "steady increase" is so trifling that it was not, nor is it now, worthy of especial notice. I pronounce it to be the smallest increase in Traffic ever known upon any Railway. It shews that developement from whatever cause is slow. The reason to be assigned by Colonel Pears would be, that the fares are not low enough, that the Railway has not yet done its work, that it has to create a demand, or that, "it has to do with a "people just emerging from a state of poverty and degradation," I think the real state of the case is to be found in the low fares. I refer you to the table in my letter, No. 35 shewing the decrease in the number of First and Second Class Passengers, and increase in the Third, during the three periods in question. In the first period the First Class averaged per week 221 Passengers. In the second period the average was 142. In the 3d period 110, total increase* 111 per week. In the first period the Second Class averaged per week 1,148 passengers. In the second period 777, in the 3d period 664, total decrease 484 per week. In the first period the Third Class averaged 7,209 per week, in the second period 7,603, in the third period 8,337, total increase 734 per week. The low third class fares developed in 1½ years an increase of 734, whilst a decrease of 111 in the first and 484 in the second, total 595 is shewn surely this is no "steady increase" in the gross earnings when 595 decrease in the higher classes which pay, and 734 increase in the lowest class, the profit upon which is doubtful.

51. I have shewn as above the amount of the "steady increase" on the gross earning, and it will be seen that it is trifling in the ex-

* Sic in orig.

reme; but upon investigation we find that in fact there was no increase whatever, but on the contrary a decrease per mile in the receipts. Col. Pears calls attention to what I clearly pointed out, that there had been these several extentions of the line, I stated in the "first period" that there "22-miles open." In "the second half year" 22 miles open for 17 weeks and 33 miles open for "8 weeks." In "the third 33 miles open for 16 weeks and 34½ miles open for "11 weeks" how far I failed to notice these facts I leave you to judge.

52. I beg to give a further quotation from my letter.

" First period gross receipts per mile per week	Rs.	110-0-0
" Second period gross receipts per mile per week	„	78-8-4
" Third „ „ „ per mile per week	„	87-6-6

We find therefore that the "steady increase" in the gross receipts which I failed to notice, turn out to be a decrease to the above extent per mile open; or whilst in the second period there was an average increase of receipts per week of Rs. 107-1-2, over the first half year, there was a decrease per mile more than equivalent to the increase on the gross earnings, and the same remark applies equally to the third period over the first.

53. Colonel Pears says. "I have already shewn how, so long as "these extentions bear any considerable proportion to the line previously brought into operation their introduction to the Revenue "accounts must of necessity lower temporarily the dividend." In another place already alluded to, para 8 Colonel Pears says. "Our "first lines hitherto have failed to pay handsome dividends in all probability because they have not had time to accomplish their work; "and every successive extension involving a claim of additional capital, "and the breaking up of fresh ground, necessarily caused a fall in the "average profits, precisely as in latter days the branch extensions in "England, have operated to the temporary depression of share value."

54. There need be no argument to prove that this view is incorrect; that primary Trunk Lines in India cannot be properly likened to Branch Lines in England, dependant and subservient as they are upon the main lines in every respect; but what I wish to point out is this fact that on the first extension of the great Indian Peninsula Line from 22 miles to 33 miles, the receipts fell from Rs. 110 to Rs. 78-8-4 per mile, but that when the line was further extended to 34½ miles the receipts were raised from Rs. 78-8-4 to Rs. 87-6-6 per mile. To

“ Great Indian Peninsula Railway

“ The third class in proportion to the first as 75 to 1

“ The third „ „ to the second as $12\frac{1}{2}$ to 1

“ The third „ „ to both classes $10\frac{1}{2}$ to 1.”

60. In the Bombay case a Passenger saved 1 anna 13 pie per mile by travelling third class instead of first, and 7 pie per mile by travelling in the third instead of the second ; but in the Irish case he saved nothing to compensate him for putting his dignity in his pocket in comparison with what would be saved in Bombay viz. 4 pie per mile only, for travelling second instead of first, and 5 pie per mile for travelling third instead of second. These relative rates on the Irish Line doubtless did develop a first and second class Traffic, and confined the third to the third class people.

61. In para 45 Colonel Pears notices “ that on a line in Ireland “ 190 Miles in length, 291,363 persons of all classes were booked in “ six months ; where as on a line in India of $34\frac{1}{2}$ miles in length 246,038 “ were booked, and considering the character of the two countries both “ in point of wealth and population, this is a most remarkable circumstance, and would shew that from some cause or other the Indian “ Railway has already become more generally available to the great “ mass of the people than that of Ireland.”

62. In the first place we will consider what these numbers were, the 291,363 travellers on the Irish line consisted of,

First	Class	42,266
Second	„	91,719
Third	„	157,378

The 246,038 travellers on the Indian line Consisted of.

First	Class	2,987
Second	„	17,927.
Third	„	225,124.

There must have been 157,378, of the poorest class of Travellers on the Irish line compared with 225,124, on the Indian line, or about one third more on the Indian than on the Irish line, the 157,378 paid 8 pie a mile, the 225,124 paid 3 pie a mile, the former yielded on masse Rs. 6,551-6-8 per mile, the latter yielded on masse Rs. 1,172-8-4 per mile, i. e. one third a greater number of people carried the same distance for less than a sixth of the money. Railways are worked cheaper

in Ireland per mile than they are worked here. If we consider, in connection with this subject, that to receive Rs. 1,172-8-4, in India there would be one third more work to do at a more expensive rate, we may imagine the ultimate result to the Indian Company ; nor need we be surprised that whilst the Irish Company pays a dividend of 6 per cent. on one part and 5 per cent. on the remaining part of the capital stock of the Company, the line costing £20,000 double that of the Indian line per mile, the Indian line with a third more of the masses to carry realized first £3.16 second £1.69 and third £1.35 per cent. upon a line costing on the average under £10,000 half that of the Irish line per mile. Yet Colonel Pears triumphantly says “ from some cause or other “ the Indian Railway is more generally available to the great masses of “ the people than that of Ireland :” this view of the case would disappear if we considered the character of the respective lines. One runs 190 miles through a purely agricultural country, has but little pleasure Traffic passing over it ; whilst the Indian line has one point and that the main one which has always been regarded as a place of immense interest in Bombay viz. Poonah.

63. In the second place Ireland is characterized for her poverty. Colonel Pears speaks of Ireland as he would speak of England, although the difference is as marked as wealth and poverty can well depict. I have already said that money is twice the value in Ireland that it is in England. India taken as a whole is wealthier than Ireland, and has a greater population.

In the third place Colonel Pears concludes that the small proportion of the 3d class to the other classes in Ireland proves that the third class is “ too high and to a great extent prohibitory ” “ and the great masses “ of the people are not reached by the Railway. The proportion on “ the Indian Railway is more reasonable but still too low to permit us “ to think that the Railway has yet been thrown open to the poor.” That is that the 246,038, should be increased by reducing the rate below 3 pie per mile for the poor. Suppose the number doubled at $1\frac{1}{2}$ pie, the 4th class rate proposed by Colonel Pears. What is gained, more money ? no ; but on the contrary increased work, and increased expenditure in every way, and as a natural consequence a decrease of dividend.

64. Colonel Pears thinks that the conclusion to which he has come, “ that the proportion between the classes on the Indian line are more “ reasonable, but still too low ; ” is supported because we “ learn ” from Lardner that the average distance “ travelled by the 3rd or lowest class “ in England is 14 miles, and ” considering that in most cases, “ a man

72. It will be seen that the Third Class in Ireland (and indeed of the United Kingdom) bears about the same proportion to the results attendant upon the Higher Classes, (1st and 2d) as the third in India bears to the third in Ireland i. e. that as we descend in the classes we find the greater amount of work, and the less receipt, or that we have reduction in fare producing a decrease in the receipt, equivalent to less money, more work, and less dividend, yet the remedy is to be found in carrying out more sweeping measures of reduction. Does not practice make us pause in this respect?

73. Having laid before you such remarks as I have felt it my duty to make in reply to the observations commenting upon the different points in my letter No. 35 of the 29th December I shall proceed to consider "the theory advanced by Colonel Pears of low fares for the "masses."

74. In para 11 of the observations we have the following sentence, "we know that as the number of each class in every country increases "in a rapidly progressive ratio as we descend in the scale of wealth till "we get near the bottom, the charges must be such as to throw the "Railway open to these large masses." The theory is still further illustrated in many other paras of the observations; in fact the principle pervades the paper throughout.

75. After careful consideration of the subject, I cannot agree in the conclusions to which Colonel Pears has arrived, and I think that so broad a principle might demand a closer analysis of the masses of the people to discover how far it would be reasonable to suppose they could largely avail themselves of the facilities afforded by Railways to convey them from one place to another at what may be called very low fares.

76. I think that due consideration of the motives which actuate men to travel should guide those who are anxious upon the subject of Railway fares and Railway management; and I submit to you that this can scarcely have had due weight with Colonel Pears in arriving at the conclusions which have led him to the advocacy of so broad a principle as the one he so strenuously advocates.

77. The Theory is based upon a supposition viz. that by providing cheap transit for the poor they would become the most numerous and by far the best Customers of the Railway Company.

78. In para 79 Colonel Pears assuming "that all men having above "£100 a year with their families take to these (1st and 2d) Classes," "says they will represent about a million persons in Great Britain leav-

"ing 19 millions to be represented by the 3d Class." The question is "then asked where are they? for the number carried by the 3d Class are "in fact very nearly equal to those carried in the other two."

79. Para 80 says "It seems to me perfectly clear that the Railways "in England have barely touched the mass of the people, and that by "high rates of charge thus excluding multitudes, the proprietors are "deprived of their best and by far the most profitable Market. I will "not venture to assert that the travellers in these two classes would "bear a direct proportion to their numerical strength: but I think we "may fairly conclude that out of 19 millions poor there would be if "the charges were within their means more travellers booked than from "among the one million of the higher classes."

80. I submit to you that it is evident that Colonel Pears has arrived at the conclusion, that Railway passengers consist of those who travel at their own private expense, the Railway fares coming, out of the Incomes of each class of people, i. e. the net sum which each man receives for his own proper use and expenses.

81. I am of opinion that the number of persons travelling upon Railways (excepting short pleasure lines) who pay their fares out of incomes to be appropriated to their personal expenditure is small, very small, in proportion to those whose travelling expenses are charged in the working expenses, so to speak, of the business or pursuit in which they may be engaged, and that a large portion of this travelling is performed by those acting for others. In this view, I believe, I am generally correct, and that travelling by Railway is charged invariably by the bulk of the passengers, not against income or profits, but against expenses, as salaries or rents would be.

82. I think there are very few of the 19 millions representing, according to Colonel Pears, the third class, in the Receipt of Incomes of £100 a year and less who travel to any extent, paying their fares out of their respective Incomes, but as the great bulk of these people, if not all, are the servants of trade and commerce, or of agriculture, they travel more or less, and their travelling is at the expense principally of those who employ them, and becomes an item of expense incurred in the business in which they are engaged.

83. The motive for travelling is essentially connected with business, those who travel least are to be found amongst the highest, and lowest classes, the two extremes of the scale of wealth.

84. I think but little could be done in any way to induce the wealthy to travel more than they feel quite disposed to do, and I am equally of opinion that the poor can never be induced to travel upon their own business proper, at any scale of fares, which Railway Companies may offer to convey them.

85. The fare must be a very secondary consideration to the working man—his time is of greater importance, the loss of which as a general rule he is not able to sustain: if to this loss be added the fare, be it what it may, and the expenses incidental to all travelling, beyond the Railway fare, it is difficult to arrive at a conviction that such working men can ever become the best customers of a Railway.

86. A close analysis of the population of any Country, with their employments, would probably enable us to judge to what extent each section of the laboring classes, the masses, could throw off upon the average for Railway travelling; but upon considering how closely they are engaged, and the possibility of their means enabling them to afford the time required, I am lost to conjecture how it can reasonably be assumed that any system of Railway management can convert them into the best customers, for the only article which Railways have to offer, viz. transport.

87. Consider the position of the agricultural laborer, the laborer in mills, Factories, mines, with wages of from 8 to 16 shillings per week how far could these people travel? and what a large portion of the masses they represent.

88. I think that the only opportunity afforded to persons so situated for travelling is by the cheap excursion Train on a Holyday, when the cost of the trip would not also involve the loss of time. If the opportunity were afforded them to travel every day, at any rate, however low, they could not avail themselves of the opportunity.

89. Instances could be shewn in which employes in the shops of Railway Companies, of different grades, had the opportunity of travelling once in three months, free, upon a working day—but they seldom availed themselves of the opportunity of travelling, because the cessation from labor involved a loss of a day's pay.

90. If we ascend in the scale and imagine any class in the receipt of incomes of £50 a year, the same general remarks apply: they could not afford the time, and the income would scarcely afford any scale of Railway fare, however low, involving such loss. I think the more you

reflect upon how the masses are engaged, the more you will become convinced, that they could not spare time to travel, leaving Railway fares, and expences, completely out of the calculation.

91. Travellers by Railway are essentially men of business; and, as before stated, I believe the cost of their transit is principally an item charged in the general expenditure of business; and I believe that every stroke of the pen raising the rates does not strike off the Railway altogether whole classes of people, but beyond certain limits it insures an amount of money, for the service performed, equivalent to its value.

92. The lowering of rates in my opinion might induce those who travel, to travel more frequently, but I do not believe that the increased journeys made, by comparatively few, would compensate for the loss in the individual fare of the many. I am clearly of opinion that a reduction in the third class rate from one penny per mile to one half penny in England, as suggested by Colonel Pears, would never be met by a corresponding increase in the Traffic either from the masses who do not, or those who do travel. I believe, also, that unless a corresponding reduction was made in the rate of the first and second classes, that the bulk of this traffic, which I believe to be the main support of the Railways there, would be lost to the Railway Companies.

93. I might hesitate to express my conviction that the masses can never become the best customers of a Railway Company, and that the reduction of the lowest class fare at home from one penny to one half penny per mile, would be ruinous to the Passenger Traffic of Railways generally, if careful experiment had not invariably compelled a return to the moderate fares now charged at home, and if Lardner's analytical tables did not point out that although the increase in numbers may be large in a lower class, at low fares, the amount of money received was small in proportion to the increase of work. I will refer to these tables hereafter.

94. Colonel Pears refers (*para* 65) to the Post Office and the effects of a reduction in the postage rates.

95. You will perceive that Colonel Pears says the net revenue has, by a steady advance, already attained nearly to the amount realized before the reduction, &c. &c.

I beg to draw your particular attention to this statement. Colonel Pears does not say, that the amount received for the postage of letters has by a steady advance already attained nearly to the amount realized before the reduction &c. but the "Net Revenue." You will remember

that Railways came to the aid of the General Post Office in the carrying out of the penny Postage. A new motive power was called into existence capable of carrying the increased weight, and bulk of the Mails. A decrease in the working expences of the Post Office was the result. The receipts of the Post Office were less, but the expences were proportionately less, hence the "Net Revenue" attained nearly to the amount

realized before the reduction. This is exemplified by Colonel Pears where he says, "In

Para 66. "1839, 76 millions of letters were carried at a gross charge of £2,450,000, while in 1849, 337 millions of letters were delivered at a charge of £2,165,349, the profit to the department steadily increasing with the "number of letters carried." You will perceive that there is no mention of the receipts for the 76 millions of letters in 1839, nor for the 337 millions of letters delivered in 1849—but the 76 millions of letters were delivered at a charge of £2,450,000 and again 337 millions of letters were delivered at a charge of £2,165,349. If Railway Companies had Acts of Parliament compelling people to supply coke, and stores, and people to supply labor at the proportionately low charges which the Post Office has exacted from the Railways, as compared with the work done in the old coach days, doubtless their "Net Revenue" would steadily increase, under any reduction of Tariff. The steady increase in the Net Revenue of the Post Office is entirely owing to the decrease in their working, and the ability of Railways to do the increased work, and will furnish no example to Railways, Roads, or Canals, unless a similar reduction can be wrought in their working expences by the introduction of some new motive power, corresponding with the new agency so well adapted to their purposes, which the Railways supplied to the Post Offices.

96. Colonel Pears calls attention to the evidence of M. Farr before a Committee of the House of Commons in 1832 on the Property and Income tax, and quotes a "remarkable Table" shewing the increase in numbers of people as we descend in the scale of wealth "to shew the immense importance of sweeping into any great national "manufactory the custom of these large masses of people." The Table is interesting in a statistical point of view; but I do not conceive that people can be induced to travel without motive, and that, as before stated, the masses of the people cannot be converted into travellers, and that essentially the Railway Traveller has business for his object: but in the case of taxing incomes doubtless something near to a certainty could be arrived at as to the increase in Revenue obtainable by law, however uncertain income derivable from the travellers by Railway from these

classes may become, the latter being optional, and the former compulsory.

97. I must beg to remark that I conceive that much that Colonel Pears advances is assumed. In para 73. "It is asked whether "it would not appear an unwise policy in the Directors of Railways "to talk of developing their higher Classes while every farthing advance in the charges blots out at once whole classes consisting of "hundreds of thousands. For it must be borne in mind that the "slightest change in our Tariff, especially among the lower classes, affects "the people not by individuals but by these large classes; and a stroke "of the pen raising the charge of the lower class with a view to driving "some of them into the upper, may close the Railway to a million of "customers."

98. I have already said that I consider Railway Passenger Traffic to be of a more staple character than is supposed by Colonel Pears. That the journies undertaken generally are of more importance than to be effected by the raising or lowering of rates within reasonable bounds. I do not think there is a class of passengers travelling upon Main Trunk lines, any where that would be blotted "out at once" by a slight increase of fare, supposing it were indispensably necessary, to insure payment of working expences and a fair percentage upon the capital, to raise the rates; but lines that would probably become affected by an increase of the rates would be a pleasure line, as the Dublin and Kingstown in Ireland, and many similarly situated, as Suburban Railways, in different countries. I cannot avoid thinking that the Directors of Public undertakings have a perfect right to develop any class of passengers, nor can I admit that it is unwise to develop that class of business, by every fair and proper means which is known to be profitable. Experience has taught Railway Directors that caution is necessary in arranging a Tariff which shall be equitable among all classes, and that it is due to the varied interests of a Railway Company to obtain that from the public which the proprietors have a right to expect viz. a fair interest upon the Capital invested.

99. Is it just towards them to insist upon a Tariff being placed before the public which experience in the working of Railways suggests is the least likely to attain these objects?

100. What could we say of the wisdom of a Board of Directors who in supplying a necessary article to the public had 3 Classes or sorts to be disposed of, if upon its being known that Classes Nos. 1 and 2 could be supplied at a profit, and that Class No. 3 was so closely priced to its

cost, that it was doubtful whether it paid any profit at all, what could be said of their wisdom, as acting in the capacity of Trustees for themselves and others, if they insisted upon supplying Class No. 3 at a reduced rate, rather than Classes Nos. 1 and 2 at rates which had shewn them they could supply it with advantage to themselves and the public; when experience had told them that the effect of reduction upon No. 3 in part deprived them of the sale of Nos. 1 and 2, would not their wisdom suggest that if the establishment was to keep open at all, they must have profit from somewhere, or cease ultimately to supply the article altogether. Yet this is precisely what Colonel Pears would call upon Directors to do.

101. It is quite true that he recommends that the larger sale of No. 3, the increased quantity, would more than compensate for any loss on Nos. 1 and 2. Increase your Manufactory—do more work—it is true that the Article has hitherto been restricted in its use but it is so essential to the well-being of the public, of the masses, of the poor people, who can hardly afford to pay for it at any price, that it will more than make up any loss you may incur.

102. In para 74 Colonel Pears again condemns the management of English Railways.—In paras 53 and 54 and in very many other parts of the observations the Traffic management is most severely dealt with. I think it wholly unnecessary to make any comments upon the condemnations, as doubtless others better able to speak of their Management, since I left them for the Irish Railways in 1848, can defend their policy, based, as I believe that policy has been, upon sound commercial principles.

103. As far as I have been connected with English Railways, I can confidently record it as my opinion that the utmost care was used, the utmost economy was practised; and in every instance, where the slightest probability of success seemed likely to crown their efforts, the greatest liberality was shown to the public.

104. I know that statistical returns were made, by which the strictest check was maintained over the expenditure, and the cost of the transport of men and things was arrived at as closely as is really practicable in an Establishment presenting such a complication of business. I kept myself Returns on the London and South-western Railway in 1845-46 shewing not only the amount chargeable to the different units of Traffic upon the whole Line, with a view to the checking of undue expenditure at one Station as compared with another.

105. In 1847 I saw Returns of the working of the London and Birmingham Line (now part of the North-western) for many previous years. These returns were quite as elaborate as those of M. Belpaire, and quite as useful. I copied one or two years for my private information, and shall I hope have the pleasure soon of submitting them to you.

106. I shall notice here a paragraph from Lardner upon this subject, at which I must say I have felt considerable surprise. Page 223 *Railway Economy*—"The reader who has not been intimately conversant with "Railway affairs, will probably be startled at being told that important as "such an investigation is, it has never been attempted by the Managers "of English Railways." Colonel Pears makes similar remarks—"they "have been at work upwards of 20 years in England and I have never "seen any attempt at a solution of these questions. i. e. "Do the Directors and Managers begin these deliberations by determining what the "transport of the individual number of these several classes cost? What "the share of waggon and the movement at 15 Miles the hour to the "3d Class, what the more comfortable carriage and high speed for the "second, what the cushion and blinds and glasses and additional elbow "room to the first"? I may answer that I believe so—and that I believe that upon no two Railways in England will the cost of the article so to speak, be the same, and that the variation of this is so great that it is scarcely the same between any two stopping places of any one Train—and that it is different with different Trains, and that it presents so curious a study, that except for statistical purposes, and for general averages, and approximating to something near to a general idea of the subject, it is not by any means a conclusive guide for all cases.

107. It is curious that with all the returns published with so much elaboration by M. Belpaire, a close study of those lines and their working does not present any favorable contrast with those of England.

108. Whilst upon this subject I would beg to observe that few men possessed of a single idea upon Railway working could arrive at any other conclusion than M. Belpaire, as quoted in the 86th para by Colonel Pears.

"1st. That we should encourage as much as possible full loads for "our Engine and carriages.

"2nd. That we should encourage passengers making long journeys; and these secondary rules, that we should make our Engines and "carriages go over as much ground as possible daily, and lastly, keep "them standing as little time as possible. Tried by this test" says Colo-

nel Pears "how does the management in England appear reported by Lardner?"

109. "The writer complains as usual of the want of complete re-
 Para 87. "turns and of the necessarily imperfect cha-
 "racter of the results but gives the following
 "as an approximation to the real facts.

110. "On the London and North Western during the year in
 Para 88. "question (1849) the average number of
 "carriages 1st, 2nd and 3rd Classes attached
 "to an Engine were 4.17 while the average number of passengers per
 "Train was under 50"

111. Colonel Pears remarks upon this as follows. "Four car-
 Para 89. "riages and 50 people thus continually carried
 "about by a machine, built and maintained,
 "and fed and driven, at a large cost, but capable of carrying at a mode-
 "rate estimate 40 or 50 carriages and 12 or 1,500 people! is this good
 "management?"

112. Now I beg to observe that this is by no means a fair sample of English Railway management, tried by any test. The report of Lardner is taken from most inconclusive data, and as applied to the formation of Trains is totally and altogether erroneous. He appears to estimate the mileage of Carriages, and to arrive at the number in each Train, by including all carriages alike whether running or not and every Railway man knows that it is impossible that every carriage can run every day. I am surprised that Lardner should commit such an error, and am surprised that no distinction between short branch line Trains and main line Trains is introduced—the former being generally very short, probably with one carriage and a light Engine, and some of the latter being long Trains consisting of from 13 to 20 carriages; but supposing the average to be as stated by Lardner viz: 4.17 carriages per Train and 48.4 passengers; this result being attained by mixing up all passenger Trains whether first, second, or third class, Branch, or main line Trains, shews nothing, and is no proof one way or other of good or bad management. No mention is made of this however by Lardner, though he says that the conclusions are insufficient, and unsatisfactory; but we find that the 4.17 should be 7, according to Captain Huish, as the average number of carriages to a Train, and how does this, tried by M. Belpaire's test contrast with the working of the Belgian Lines? The average number of passenger carriages per train for 4 years were 6.77, and passengers 78.53. The Belgian lines alike with the English, and indeed all Railways,

including those of France, and America, come under the same sweeping censure. The latter conveyed 54 Passengers per Train, and the Railways in other countries are not managed better in this respect.

113. But is it to be inferred that this machine, built and maintained, and fed, and driven at a large cost, is capable of carrying at a moderate estimate 40 or 50 carriages and 12 or 1,500 people?

114. This is a question for a Locomotive Engineer to study: but I may say that there are few Locomotives engaged in passenger Traffic that could accomplish the feat, and still fewer Trains to be found of such length and contents; and if there were as a regular feature in the Traffic upon a Railway, it could not by any known process of working be built, maintained and fed, if it could be driven, at the cost of the Engines used in ordinary passenger Traffic.

115. There can be no doubt that the Directors of Railways at home, considering that "time is money" to all men, and particularly to a commercial people, have found their true policy to consist more in affording increased facilities to their customers than in the reduction of rates, and that to cause fewer departures at reduced speeds, in order to obtain increased profits by increased numbers, carried in monster Trains, would be to pursue a course which their hourly Train by Train, experience demonstrated into a certain conviction was precisely the reverse of what society and the interests of the Company demanded.

116. The economy of time being regarded as an equivalent for the economy of money, and the time of a busy and energetic people being of greater value than could be compensated for, if lost, by few departures of Trains at slow speeds, the increase in the number of Trains and their acceleration upon Railways would be more popular than a reduction of fare, and doubtless the Directors of Railways in England have long since discovered this to be a leading fact and a great feature in their arrangements.

117. Suppose however that a Railway Directory were impressed with an idea that the speed of their Trains should be reduced, and that 4 Trains should be merged into one large Train. I will venture to predict that a decrease in the receipts would check this retrograde movement, which in order to economise in working the Railway, wasted the time, trifled with the business, and interfered with the comfort of the best customers of the Railway Company.

118. Colonel Pears remarks upon the cost "per Train mile" and says "what do we learn from this? The best we can hope is that we

"learn nothing, for indeed it is directly calculated to mislead." I must beg to observe that cost per Train mile may present difficulties in arriving at a just comparison between the working of any two Railways, on the part of any one not acquainted with one or both of the lines; but cost per Train mile presents at once to the Directors of the Railway acquainted with its detail a certain guide as to the cost of working. The cost per Train mile is ascertained upon each description of Train, light, heavy, and goods, and the slightest increase in such cost meets with immediate enquiry and causes a strict check upon the expenditure in detail. The cost per Train mile is looked to particularly in the Locomotive Department, and it should be observed that this cost is by no means a matter arrived at by general average, although a general average is finally presented—but it is checked in detail. Every journey has its record of number of carriages, weight of load, and consumption of Coke: and as presenting a general guide for Railway Directors has been found the most convenient and best mode of establishing strict supervision.

Para 91.

119. Colonel Pears says. If with a given number, say 500 passengers "we work only one Train, the general expenses are all thrown upon this Train, but its cost is divided among 500 passengers. Divide them into 5 Trains and the general expenses are distributed over the five, reducing the cost" per Train mile "while the total expenses of each Train has to be borne by 100 passengers, making it fall far heavier upon each."

120. Para 92. Gives an illustration of "the manner in which good management as shewn in well filled trains would operate in favor of the people."

121. This supposes a Train to leave "Madras for Arcot with 1000 passengers, at $1\frac{1}{2}$ pie per mile each, the total receipt would be $1\frac{1}{2} \times 60 \times 1000 = \text{Rupees } 469$. Now the cost per Train per mile on 4 light Trains in Bombay is Rupees 1-8. Let the cost of this heavier Train be doubled and the journey would cost $60 \times 3 = \text{Rupees } 180$. "The profits upon the one Train would be nearly Rupees 300."

122. Assuming the most favorable view of this calculation, we may ask are you sure of the 1000 passengers? if any material decrease in the numbers the calculation is upset and the profits of Rupees 300, in reality Rupees 289, would be reduced. The Train would have to return from Arcot to Madras—what provision is made for that? is it supposed that 1000 passengers would return, if so there would be a profit of $\text{Rupees } 289 \times 2 = 598$.

123. I may state it is a general opinion that such a Train at such a rate, run regularly, would materially change the 3d Class, if not altogether annihilate it; and that it is almost, if not quite certain that such numbers as 1000 would not offer themselves for conveyance very frequently; such Train run daily each way would require nearly twice as many passengers in a week as we now carry in a month; could the District produce such a number of the Travelling public? It is generally supposed to the contrary, and that the numbers would not yield anything near to the assumed quantity of 1000, in which case the calculation would fall to the ground.

124. Lardner says—page 306 of his Railway Economy "In the case of passenger Trains frequent departures are indispensable for the public accommodation; and it becomes a problem of much difficulty to fix such quantity of departures, as, on the whole, will produce the greatest amount of profit to the Railway, with all reasonable accommodation to the Public. It is clear that the more frequent the departures are, the less complete will be the load not only of the Engine, but of the Carriages. But on the other hand, if the departures were so few as to secure nearly completed loads, then a considerable amount of the traffic would be lost to the Railway."

125. This observation is quite correct, and shews that the running of Trains cannot be dealt with in a superficial manner, and must be the result of careful experiment and observation as to what accommodation the public will require, and what the most advantageous arrangements for the Railway Company. "Many Railways depend entirely upon" the frequency of their Trains, all Railways are more or less influenced by it; but as a general rule the application of Col. Pears' principle would destroy the bulk of Railway Traffic altogether.

126. I think the writer in Herapath's Journal adduces no evidence in support of his assertion that the most important duty of Railway Directors, in apportioning the Train-service to the public requirements is in most cases entirely neglected. It is only worthy of notice in my opinion as having been quoted by Col. Pears.

127. I have before said that I would refer to Lardner's Tables. In paras as per margin Col. Pears draws attention to Lardner's statements in reference to the Act passed with a view to secure to the poorer classes the means of travelling by Railway at moderate fares. The main features are des-

cribed, viz. one Penny per mile, one Train a day, 12 miles an hour, involving an actual reduction in charge and an increase in comfort. The really main and important feature was providing the carriages with seats and protected from the weather in a manner satisfactory to the Commissioners. "The carriages that have been approved of by the Commissioners (says Lardner) for the conveyance of third Class passengers are generally commodious; protected from the weather, lighted and ventilated, and in many instances provided with lights at night, although this is not required by the Act."

128. Col. Pears favors me with the following remark; "according to Mr. Fletcher's views such an arrangement would have been attended with ruinous consequences, interfering with the developement of the 1st and 2d Classes." "But," says Col. Pears, "what are the results"? I propose now to consider those results.

129. Col. Pears has quoted a portion of one of Lardner's analytical tables to prove that reduction of rates gives increase of numbers, and of course, increased receipts; and that the masses are the best customers of the Railways.

130. As Col. Pears gives a part only, I refer you to the Tables copied in full and annexed.

131. Col. Pears says that a change in the direction of reducing fares was not likely to be made at all but for parliamentary interference. Now I refer you to the annexed Tables: you will perceive that in 1843 the average receipts per passenger per mile for 3d Class was 1.17d; in 1844 it was 1.05d; in 1845 0.97d; in 1846 0.92d. you will see that the Railways in 1843 charged 20 per cent more for Third Class passengers per mile than they charged in 1845, and that each year from 1843 shews that a less and less charge was made by them for the lower class, without parliamentary interference; and that the parliamentary interference reduced the fare very little below the amount to which the Companies had themselves reduced it.

132. You will find that when the third class fares were reduced in 1844 from 1.17d. to 1.05d. that "the proportion in which each Class of passengers contributed to every £100 of gross revenue" were affected as follows—The first Class decreased from 44.58, to 43.60, and the Third Class increased from 13.59, to 14.63. In 1845 a further reduction from 1.05d. to 0.97d. was made, the first Class further decreased from 43.60, to 40.51, and the third Class further increased from 14.63, to 17.15.

133. Before the penny per mile Act of Parliament came into operation, the Tables arranged by Lardner would show that a reduction in the lower Class affected the higher, but when the Act came into operation we find a much larger decrease in the first Class, year after year, exactly corresponding with the increase in the third Class.

134. The covered Carriages with seats at one penny per mile compelled great changes in the arrangement of Trains, and particularly in the mode of running the second class. There had been express and fast Trains comprised of first Class only—these invariably, if not in every case, were made first and second class, instead of first, and the second class fare was reduced from 1.92 in 1845 to 1.44 in 1846, or one half penny per mile. These circumstances fully account for the second class remaining unchanged as noticed by Lardner, and it is easily seen that the Act of Parliament caused a change throughout the passenger Traffic. Many left the first Class for the second, and both the first and second classes for the third, thus whilst the second remained unchanged the first Class decreased as the third increased—Thus the Legislature entailed a large amount of additional work upon Railways without any increase in the receipts, and this was done whilst new districts were being opened, and a large extension of the Railway system was being introduced; an extension which required great caution in arranging the Tariff, if fair interest upon the outlay was considered desirable.

135. Lardner, speaking of the "proportions in which each class of passengers contributed to every £100 of gross revenue," says, in page 273, "This table exhibits in a remarkable manner the progressively increased use of the Railway made by the inferior classes of Passengers. It will be observed that the proportion of the entire revenue contributed by the second class passengers was sensibly the same during the entire period included in the above Table, being about 41½ per cent, but while the proportion contributed by the first class Passengers fell from 44½ to 30½ per cent, the proportion contributed by the third and inferior classes rose from 13½ to 28 per cent."

136. Great stress is laid both by Dr. Lardner and by Colonel Pears upon numbers carried—work done—but comparatively little is said of the Receipts of Money earned.

137. Lardner, speaking "of the proportion of business supplied to the Railways of the United Kingdom by the several classes of Passengers respectively" says, Page 173 "Hence it appears that in every

"point of view in which the business of a Railway can be considered, "the two inferior class passengers form its chief source."

138. Explaining the table as shewing the module of the business transacted at the stations (Nos. booked) and the module of the business transacted on the road (Mileage), he says, "Taking the average of all the results, it may be stated that the business supplied to the stations by the three classes of passengers, first, second, and third, is in the ratio of the number 1, 3, & 4; and, consequently, that the second and third class passengers collectively supply seven-eighths of the entire business. It appears also from the second column, that the same predominance prevails with the inferior classes in supplying the business of the road. The mileage employed by the second class is double that of the first, and the mileage employed by the Third class is two and a quarter times that of the first; the relative proportion of transport among the three classes being as the numbers 4, 8, & 9 very nearly. The second and third classes collectively therefore, employ more than four-fifths of the mileage." No special attention is directed to the relative proportion of work done to money earned in the several classes, but I beg now to draw your particular attention to the relation one bears to the other.

	First.	Second.	Third
Number booked, i. e. business at stations, stand in the ratio of the numbers-	1	3	4
Mileage, i. e. business on the road, being as the numbers -	4	8	9
Receipts—for first, second and third classes stand thus	1.00	1.16	0.63

139. May I not reasonably ask to which class we may yield the palm as being the best customers of the Railway? Lardner leans much to the lower classes. Col. Pears thinks the lowest class, the masses, are the best customers. I leave you to form your own opinion. But it may be alleged that there is a difference in the cost of working these several classes;—that greatly depends upon circumstances and is subject to explanation. When Trains are run with first, second and third class carriages attached, there would not be found any very great difference between the cost to the Company of the "cushion and blinds" and "glasses" and additional elbow room to the first as compared with the "hard board" of the third, but when third class Trains are run separate and apart from the other classes, they may be worked at a slightly reduced cost, and the number of Trains are less for the third

than the higher classes, but not to an extent which could alter materially the conclusions to which I have arrived, that the lowest classes, the masses, are not by any means, although the most numerous, the most profitable customers of the Railways.

140. Colonel Pears speaks of the increase in the numbers of the third Class, "the first and second also increasing steadily, though not so rapidly as the third" over corresponding periods of time. The increase in number, mileage and receipt, should be taken in connection with the miles of Railway open; a glance at the tables annexed will show you in what proportions these increases have kept pace one with the other, the one considered without reference to the other is calculated to mislead. From some cause it is evident that Railway Traffic has declined since 1846, a reference to the Tables will shew in what proportion. Two causes may be fairly adduced as leading to this result, 1st the rapid extension of the Railway system beyond the limits which the country could bear, and secondly, the introduction of a compulsory low rate which governed and controuled the fares of the higher as well as the lower classes; these circumstances will in due time have their weight, and will probably teach a lesson to other countries, that there is a limit to which Railways can profitably and judiciously be extended, as well as a limit to which Railway fares may be judiciously reduced.

141. I will instance the foregoing observations by the facts contained in the descending scale as follows.

Average number of passengers and receipts per mile per day which would have been carried and received over each mile of the entire system of Railways under operation, if the passenger Traffic had been uniformly diffused over the whole.

Date.	Miles open.	Number.	Amount £.
June 30th.			
1843	1857	558	4.58
1844	1952	625	4.83
1845	2148	672	5.05
1846	2441	895	5.30
1847	3036	727	4.65
1848	3816	652	4.12
6 Months.			
Decr. 31st.			
1848	5007	572	3.59
1854	7892	563	3.18

142. In a former part of the observations, para 82, Colonel Pears says the maximum of the higher class has been found: "we may be pretty sure we have found it when the number of travellers by the higher class falls off or even remains stationary. The highest class of society have then got as much of speed and comfort as they require at that price. The lower limit has never yet been attained."

143. We have seen what the "Parliamentary interference" did in developing the paying classes, and increasing the numbers in the lowest class, yet we may be sure that society has got as much of speed and comfort as they are willing to pay for, when a covered carriage at a reduced rate is offered them.

144. We may see from the following quotation that the lower limit has been attained in the lower class in the United Kingdom. The daily receipts per mile of Railway open of the third class were in 1846 £1.20, 1847 £1.20 i. e. stationary. In 1848 £1.13, 6 months ending December 31st 1848 £1.00, and as the traffic returns for 1854 shew a considerable decrease on the gross Traffic over 1848, we may assume that the decrease in the third or lowest class has continued.

145. Many Railway Companies, acting in the spirit of liberality which provided for the third class more than the Act required, as stated by Lardner; and seen every day, extended the number of third class Trains beyond the prescribed number, of one each way daily, and increased their speed; such was the experiment tried with the best intentions on the part of the Directors by the London and South Western Railway Company. The experiment was attended with more ruinous results to that Company in particular than the lowering of fares by legislative enactment entailed upon Railways generally. It was seen that the principle was not sound, and the more it was applied the more striking the failure; yet this experiment was a "jumble," and "unsound in principle," unsound because the limit had been found placed beyond which fares could not be judiciously reduced.

146. I beg to point out further that the Directors of Railways generally discovered that they had passed and had been forced to pass the legitimate limits in the reduction of fares. Lardner's tables will shew you that in 1845 the third class rate was 0.97*d.* per mile. In 1846 the compulsory reduction decreased the average charge to 0.92*d.* In 1847 the rate was raised by the Railway Companies to 0.99*d.* up to December 31st 1848 (18 months) the rate had been raised to the full amount chargeable by law, viz: 1.00 would this have been done if experience had proved that

low rates were remunerative? In descending the scale the lower they got the worse the features became, a reaction was the result—could they reasonably be taxed after such experiments with having no other motive than to make each man pay the most they could get for his seat. I think not.

147. Colonel Pears says, in para 53, that his "opinion is that the Traffic of the Railways in England is conducted, so far as the Tariff is concerned, either on no fixed principles whatever, or on principles which are wholly unsound." And in para 54 that this is an "opinion" which he "should hesitate to give did it not appear to be the common opinion at home, and did it not appear further" to him "that however active, honest and energetic the Directors and Managers may be, there is in the position and tenure of Railway property in England that which renders good management almost unattainable."

148. As far as my observations extended to the Railways at home there was a general opinion abroad that Railway fares were too low; and I instanced this by quoting the advance in the rates by many of the Irish Companies in my letter, No. 35, of the 29th December last.

149. As an instance of the feeling generally on the subject of high and low fares in the United Kingdom, and the benefits which the Railways have conferred generally, I quote one of the popular periodicals of the day, viz. Chambers Edinburgh Journal, 12th April 1856, from "The case of the Railways." "The entire outlay has been £226,000,000, and the annual Revenue available for the proprietors is such (apart from what are called preference Stocks) as to yield little over 3 per cent. A fine business this for those engaged in it! use the Railways, abuse the Companies, seems to be the maximum on which the public acts." If it were a custom among us to seize "a particular class of the community, saddle and bridle them, mount their backs, and compel them to carry us about without the provender usually given to other beasts of burden, and with occasional but liberal administration of stripes and scoldings for real and fancied shortcomings, it would be something like the case of the unfortunate holders of Railway property in Britain. There is of course, little reason to expect a general reduction of fares, for we have reserved scarcely a vestige of control over that department. But this hardly presents an immediate subject of regret, seeing that fares are at this moment perhaps rather too low than too high. That they are everywhere below the old charges for travelling is beyond dispute. Equally true it is that the Railways transport goods at much lower rates than any of the

“ former carriers ; coal, for instance, is carried by them at an average of
 “ a half penny per ton per mile, while the old charge by the canals
 “ was three half pence for the mere water* road, with a charge for car-
 “ riage besides. An addition of one shilling in the pound on the fares
 “ would make a large and sensible improvement in the profits of Rail-
 “ ways, and would be little felt by the public ; we would have the
 “ public, too, to be somewhat more mindful of the benefits they have
 “ already derived from Railways, it would improve their patience under
 “ evils for the time unavoidable. With all their faults, follies, mistakes,
 “ sins of omission and commission, these Iron roads, which take
 “ 20,000 Tons of metal and 3,000,000 of trees per annum merely to
 “ keep them in repair, have immensely subserved the conveniency, and
 “ promoted the wealth of the people of this country. They save the
 “ Public two-thirds in fares and tolls, they have given us the penny
 “ post, which could not have existed without them ; they have inter-
 “ sected the country with Telegraph wires, employing 3,000 persons,
 “ stretching a distance of 86,000 miles and flashing a million of mes-
 “ sages in the year, many of them to and from places hundreds of
 “ miles apart ; they have reduced the cost of many articles of general
 “ consumption, and rendered others common where nature had seemed
 “ to plant an interdict against them. In 1854 it is calculated that
 “ 2,000,000 of live stock were brought to the metropolis, and two-
 “ thirds of this enormous number came by Railway and Steamers.
 “ Independently of lessened expense of transit, Cattle lose twenty pounds
 “ in weight for every hundred miles they are driven, and all this is saved
 “ in addition to the difference in the cost of transit. Besides livestock,
 “ Railways bring to London in the course of the year upwards of
 “ 80,000,000 pounds of killed meat, much of which is distributed by
 “ the same means throughout neighbouring towns. More than half her
 “ supply of fish, 230,000 Tons in the year, is transported by Rail ; more
 “ than 1000 Tons of green food every week, and milk by millions of
 “ quarts in the year, the itinerant dealers selling their Railway milk
 “ more than 25 per cent under the usual price. In many important
 “ inland towns, fresh fish were unknown luxuries before the fiery
 “ locomotive came to their aid. Birmingham is a hundred miles distant
 “ from salt water, yet fish may be bought there in the afternoon taken
 “ fresh out of the sea the same day. The Carriages of these Railways,
 “ 150,000 in number, drawn by 5,000 engines, travel every year an
 “ aggregate distance of 80,000,000 miles. In 1854 they transported
 “ 111,000,000 passengers, travelling an average distance of twelve miles
 “ each, and in such safety that in the first half of the year but one

“ accident happened to every 7,195,341 passengers. In these journies
 “ each passenger gains an hour in time, amounting in all to 38,000 years
 “ of working-life, at eight hours a day. Supposing the day's labor to
 “ be worth three shillings, these deplorable Railways save the nation
 “ £2,000,000 a year in the item of time alone.”

150. The writer is not far wrong in his views, and I quote them because I believe that the public tone generally towards Railway Companies at home is improving.

151. I will briefly allude to the tenure of Railway property which renders good management almost unattainable. Col. Pears' views are given in paras as per margin. The constitution of Joint Stock Companies presents one redeeming feature over other institutions, worthy of notice ; they constantly produce men, ready and willing to conduct their business ; however much a Company may be depressed, however much there may be to dishearten, their very nature and constitution produce men ready for any emergency they may present. They have probably possessed the best constitution that could be devised for surmounting the difficulties with which many, if not all, Railways had to contend during their construction and want of capital ; and whatever evils may arise from the way in which Railway Stock may be dealt in as a marketable commodity, those evils are applicable to every other description of stock in the natural course of business and things.

152. I believe that, as a general rule, few entrusted with the management and control of Railways, are to be found amongst the speculators ; and a Railway must present to them the one sole and great feature that it has a proprietary representing the money invested, and upon which a fair interest is fairly to be expected.

153. Any body of proprietors, however philanthropic, must naturally object to a course calculated to lead to a depreciation of their property, by a reduction in dividend, unless they could be shown that practice supported the theory upon which they were called upon to act.

154. This very constitution of things must check undue speculation, and in the end exercises a control leading to sound and healthy results, since no great and fundamental changes can take place without attracting that amount of attention which must lead to discussion—from discussion to reflection—and in the end to a proper and equitable solution of the question.

155. In para 98 Colonel Pears considers that the charge proposed by me for the lowest class as most injudicious, and utterly prohibitory as concerns 3^{ths} of the people. I need not say that I adhere to the opinions expressed in my letter, No. 35, upon this subject, and that I am of opinion that the rate would not be prohibitory to those who travel.

156. Passing over several paras of the observations as having been generally noticed in the foregoing remarks, I draw your attention to para 121; Col. Pears says, "It seems to be the more necessary that Government should cause the subject to be well weighed, and the scale of charges established if possible upon those only sound principles which are found based upon great invariable truths, because in the contract with the Railway Company it seems that when once the Tariff is fixed, no change can be authoritatively made unless the profits exceed 10 per cent," and it might have been added, "but only with a view of limiting the said fares and tolls so far as the net receipts shall not exceed 10 per cent." It is beyond my province to consider the law of the case, but any tariff should be modified from time to time as occasion may require, and I venture to hope that the contract will freely admit of such changes as may be deemed necessary. I freely believe that Colonel Pears is firmly impressed that the charges he has proposed would pay eventually fair interest upon the outlay, and that he is firm in the conviction that the masses of people would pay masses of money for travelling, but "sound principles which are found based upon great invariable truths" demand that, as there are two parties to the contract, both shall be consulted in the arrangement of the Tariff, the one proposing, the other sanctioning, if approved, the scale of fares and rates which are best calculated to produce the results which both parties appear to have contemplated in entering upon the contract.

157. The remark in para 122, that the sentiments of the Railway Managers tend rather to increasing than lowering the rates, is premature. A scale of rates and fares has been proposed by this Company, based upon moderate fares (notwithstanding relative terms), and such as they believe will develop the resources of the country, and are best calculated to obtain fair interest upon the capital invested, and make the Railway self-supporting. I think they may fairly lay claim to acting in perfect sincerity, and under as firm a conviction of doing that which, in the end, would prove to be the best, as representing the Railway Company, as Colonel Pears may fairly lay claim to, as acting on the part of the Government, for the Honorable East India Company, and I have no

hesitation in affirming it as my belief, that the Railway Company would prefer lowering rates to raising them, if it could be shewn that it would be wise or politic to do so.

158. Colonel Pears says in this para; *
* Para 124. "In the report referred to, Mr. Fletcher has proposed to commence operations on the Madras Line by running two Trains daily each way. I do not approve of this—but shall submit this question to Government hereafter."

159. My opinion was as stated in the report referred to, that not less than two trains each way should be run, so that the same accommodation should be afforded to those who wish to travel east, as well as to those travelling west.

160. I beg to observe that I adhere to the opinion I have already expressed relative to the Trains to be run upon this Railway, and beg to observe that there is a liberality to be exhibited by a Railway Company besides that involving a reduction of fares, and which in the end will have as great an effect upon the Traffic of the Railway, and upon the public interests and convenience, as any money consideration—In the times of arrivals and departures of Trains, their number and speed. If Passenger Trains are run at such intervals of time as not to supply the requirements of the district, at such hours as to render them inconvenient, they act as prejudicially as a high and prohibitory rate. If in order to accommodate one, and perhaps the smallest description of Traffic, all other Traffic is made subservient—that also is prohibitory and illiberal. If Trains are delayed unnecessarily upon the line by a real or supposed idea that by a very slow speed a saving may be effected in the working—if the Trains are detained until monster loads can be found, that too is illiberal, and interferes as much with the profits of the merchant, and through him of the producer, as a high rate could do, whilst at the same time it interferes with the due development of Traffic, which in its turn injures the Railway.

161. Colonel Pears concludes his observations with remarks upon the Goods Tariff, to which he believes the same principles to apply as those he would adopt in conducting passenger or coaching Traffic.

162. As before stated in para 3 I have submitted to you by my letter No. 111 of the 21st June, my opinions in full upon the rates and fares as ordered by the Government to be adopted upon this Railway, which includes the classification and rules for goods.

163. Colonel Pears' observations induced the Government of India to supersede the order for the adoption by this Company of the Goods Tariff in force upon the East India Railway, and to substitute in its stead a classification and Tariff rather lower than the original proposition of Colonel Pears, to charge all goods alike, at 8 pie per ton per mile; inasmuch as the bulk of the goods conveyed between Madras and Arcot are conveyed for 7 pie per ton per mile, the classification being so arranged that very few articles of general consumption are placed in the higher, or second and third classes.

164. I think it would be unattended with any useful result to enter into a further discussion upon this point, I will therefore merely observe that I consider the rates and the classification alike impolitic, and not calculated to promote the interest of the Company.

165. Colonel Pears gives his reason for recommending a uniform rate of 8 pie per ton per mile.

166. I beg to observe that the two reasons assigned, appear to me totally inadequate to justify the introduction of a principle, so novel and unknown amongst carriers and Railways, as one uniform rate for all classes of goods.

167. I submit to you that the classification of goods upon intelligible principles, need not involve a complicated Tariff, or one which the "subordinate agency employed in the management of the Traffic" could not easily and readily understand.

168. Every carrying Company, whether their operations have been conducted in a manufacturing or agricultural district, has classified the goods they carry, well knowing that the business must entail upon them the necessity of conveying some goods at less rates than others, agricultural produce admitting of classification as well as the produce of commerce or manufactures.

169. It does not necessarily follow that class No. 2, shall be made prohibitory, by charging double the rate levied for class No. 1; nor that class No. 3 shall be made twice that of No. 1, and a one third more than No. 2; the experience of a carrier would suggest rather that the classes should, by marking a difference in charge between goods of certain values and bulk, not make the differences so wide that a charge appears too small for one class, and too large for another.

170. I think that "both the business and the profits" and the "bounds of usefulness" of a Railway would become extended, by a

judicious classification of goods under a proper and equitable Tariff, rather than circumscribed, as it would be pursuing a course much more likely to become identified with the varied interests concerned in an extensive district of country, by proving to each class of customers, that the Railway could and would adopt itself to their wants and requirements, by charging for the conveyance of each class of goods, at the rate (and no more) that it was capable of bearing.

171. I conceive that, however much it may be desired to establish a principle by which all descriptions of Traffic shall be charged at the same rate, because it may cost the same amount of money to transport each ton alike a given distance over a Railway, whether the ton consists of wheat or coals; I think the carrier who made this weight charge, without reference to the value of the commodity, or the rate it could afford to pay for its carriage, would not give satisfaction to his customers by charging the same rate upon an article the profit upon which may be small, whilst the same rate was charged upon an article the profit upon which might be large, the former would feel that the carrier did not study his interest by making small profits pay equally with the large.

172. I think that to depart from the principle of making a "sort of ad-valorem charge of the carriage of a great variety of articles" would not be attended with any advantage, whilst the most intelligible and most readily understood line, between different classes, involving risk of damage, loss, and the incidental drawbacks connected with the carriage of goods, would be destroyed only to raise up in some other shape, but upon less reasonable principles, a difference in rates between different goods.

173. It is unnecessary to notice the paras as per margin, inasmuch as the Tariff connected with them has been superseded.

174. As Colonel Pears justly remarks. "That which may be exactly suited to the Bengal Railway and its circumstances does not necessarily suit us here. In Bengal the Rail runs away hundreds of miles up a line of large existing Traffic, following the course of the great river, and picking up from the great cities long established on its banks the accumulated Traffic of the whole valley of the Ganges. Here we stretch across the open plains. The Railway has to look to itself and its own attraction to draw Traffic from the neighbouring districts, it

"can only do this, by offering cheap as well as quick and safe transport for men and goods."

175. In Bengal the Rail has to compete with a river, "picking up" Traffic "on its banks." Here, the Railway, stretching "across the open plains," has only "to look to itself, and its own attractions to draw Traffic from the neighbouring districts." There is no River here to compete with it, and to aid it in developing its traffic; the sole competition is that of the road, formidable enough perhaps, but not to be compared to that of a "Great River" with "great cities" "long established on its banks." How are the two cases met? Each Railway has its separate Tariff. The lowest rate is ordered for adoption here, with nothing but roads to compete with, and the higher rate is put in force in Bengal, with competition by both road and River. May I venture to ask if these are sound commercial principles?

176. The latter part of para 131 touches upon a very important point connected with the Goods Traffic of Railways in such a country as this, running over vast tracts of country, the Towns being situated with wide distances apart.

177. To meet the emergency, Colonel Pears would apply the supposed never failing remedy of low rates. Colonel Pears would say, to "extend the bounds of its usefulness the charges must be lowered, "the more it is lowered the further its influence will extend;" a very little reflection shews "that every additional mile given to the radius of "a circle, the centre of which is a Railway station, adds to that circle "a greater extent of land, and larger number of people, as we recede "from that centre."

178. Let us consider Colonel Pear's plan of applying a reduction of rate upon the Railway per se as a remedy. By reducing the rate so as to make the Railway of real advantage to, and available to, the man 50 miles off—who is served? The Railway loses the rate it could have commanded from the district through which it immediately passes. The man in the home district sends his produce into the markets to greater advantage than the man at a distance could do. He can afford to sell it for a less price. The man at a distance sends his goods either partly by Road and partly by Rail, or all the way by Road. In either case he pays a higher rate of carriage, and therefore goes into the market at a disadvantage, or is undersold by his more fortunate competitor; and the low rate upon the Railway, instead of encouraging the man 50 miles from the station, only creates for him rivals in the sale of

produce, who can always undersell him in the market, and may probably, in the end, drive him out of it altogether.

179. Apply this principle to any article grown in the respective districts of Arcot and Palmanair,—could the latter compete with the former? The low rate presents very little advantage to the more distant man. The Arcot man is charged 7 pie per ton per mile. The Palmanair man pays the same, with the additional cost of Carriage by road from Palmanair to Arcot; what advantage, then, could a low Railway rate present to the man 40 or 50 miles distant from a Railway station?

180. In England the emergency would be dealt with in a different, but more profitable and by far a more efficacious method; increased facilities would be thrown out for the accommodation and convenience of the distant town. A well devised system of carriage on the Roads connecting the interior of the country with the Railway, extending its usefulness, and opening up communications with Towns and districts, would be arranged; exercising a much greater control over the Traffic, 30, 40, or 50 miles distant from the Railway Station, than any reduction of rate made upon all Traffic alike, whether local or proceeding from a distance.

181. An arrangement of this kind, and there is no reason why it should not be made in India as elsewhere, would involve the making of "through rates," precisely as is done through the Railway clearing House at home between a carrier and the Railway Company. It would probably necessitate practical reduction in the local rate when charged upon all "through" or distant Traffic, a rate divisible between the carrier by Road and the Rail; that rate would give to the Railway probably 4 or 6 annas per ton less than the local rate.

182. In England it would not be inferred that because such concession was made to equalize a Tariff throughout a whole district or country, that therefore all goods should be carried alike at the lowest, or "through" rate. It would not be met there with the observation, that either the company made a profit upon the smaller or through rate charged, or they did not:—if they did make a profit, then why not charge all alike?

183. In the carriage of goods, as in Passengers, I think the same principles apply. There is more to be effected by affording facilities and conveniences to the public than in the reduction of rates; and I am confident that if the sound commercial principles which are pursued in

the Traffic Management of the English Railways is allowed to work here, that not only will the Traffic be insured to the Railway, but the bounds of its usefulness will extend day by day, and in the end it will become self-supporting, and pay fair interest upon the capital invested.

184. I had written thus far when the Madras Athenæum of this day's date (14th October) came to hand. I refer you to the article headed "The Railway;" you will perceive that upon a recent proposal to carry ice by Passenger Trains at a reduced rate, (being a mean between the highest class for goods and the ordinary parcel rate) which would be understood at home as a van parcel rate, the Consulting Engineer observed, "Contrasting this Table with those already sanctioned for parcels by the Passenger Train, and" Goods "by the Goods Train, it will be seen that it is proposed to carry a maund of ice by the Passenger Train 200 miles for 20 annas, or 240 pice, which is the rate of one and one fifth pie per maund per mile. The highest rate for Goods (3d Class) is three fourth pice per maund per mile, exclusive of terminal charge. For parcels conveyed by Passenger Train the present rates are 50 miles & under.

Exceeding 50 & less
than 100 miles.

" 5 Seers and under.	0	8	0	0	12	0
" above 5 Seers and less than 20 Seers.....	0	12	0	1	2	0

" being at the rate of Rupees 2-4-0 per maund for 100 miles, or about four and a half pie per mile. The Table is not carried up to 200 miles, as is that now proposed for ice. I think for ice conveyed by Passenger trains, the rates proposed by Mr. Fletcher are very reasonable; and if a commodity of this nature can, as I conclude Mr. Fletcher believes it can, be carried with profit at this charge, the present parcel rates would appear to be too high." Colonel Pears then approves of the rate by Passenger train, but thinks ice (which Government sanctions) should be sent in the lowest, or first class, by Goods Train; yet ice is of all things the most perishable, likely in its waste to damage other goods, if loaded with them, and is worth here 1½ anna per lb. as ice, but nothing as water.

185. You will perceive that the proposal to facilitate the transmission of ice at a reduced rate for the public convenience is immediately met with the remark, "that if a commodity of this nature can, as I believe Mr. Fletcher believes it can, be carried at a profit at this charge, the present parcel rates would appear to be too high."

186. I have omitted to notice in due order the following remark in para 128, referring to the classification of goods, and rates for each class. "The principle effect of such a system here will be to promote extortion or collusion among the subordinate servants of the Company;" I would beg to observe that under a proper system of check, such as I hope is practised upon this Railway, that no such extortion or collusion can take place, and that I apprehend no difficulty of the kind, as this would be one of the last methods of extortion or collusion that the subordinate servants of the Company could practise without certain detection, precisely confirming the foregoing remark.

187. I regret the extreme length to which the consideration of the observations of Colonel Pears have compelled me to address you. I plead in justification the importance of the subject, and the great interests involved, coupled as those interests are with the extension of the Railway system, bearing civilization and prosperity, not only throughout British India, but the whole world.

I have &c.,

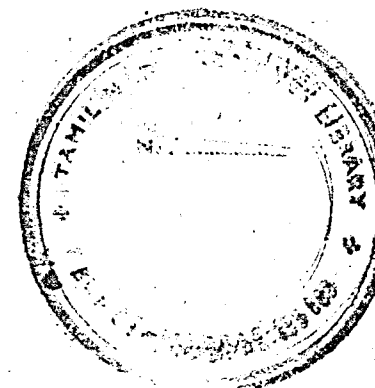
(Signed) H. A. FLETCHER,

Traffic Manager.

(True Copy)

T. A. JENKINS,

Agent and Manager.



Tabular analysis of the Revenue arising from the Passenger Traffic on the
during the Six years and a half ending December 31st

	Total Re- ceipts.
	£.
Twelve months ending 30th June 1843.	
1st Class,	1,386,942
2d Do.	1,300,758
3d Do.	422,557
Total and Averages....	3,110,257
Twelve months ending 30th June 1844.	
1st Class,	1,499,688
2d Do.	1,436,537
3d Do.	503,069
Total and Average, ...	3,439,294
Twelve months ending 30th June 1845.	
1st Class,	1,610,805
2d Do.	1,683,633
3d Do.	681,903
Total and Average, ...	3,976,341
Twelve months ending 30th June 1846.	
1st Class,	1,691,724
2d Do.	1,967,773
3d Do.	1,065,719
Total and Average, ...	4,725,216
Twelve months ending 30th June 1847.	
1st Class,	1,725,759
2d Do.	2,098,080
3d Do.	1,324,163
Total and Average, ...	5,148,002
Twelve months ending 30th June 1848.	
1st Class,	1,796,033
2d Do.	2,355,653
3d Do.	1,568,696
Total and Average, ...	5,720,382
Six months ending 31st December 1848.	
1st Class,	1,003,516
2d Do.	1,860,468
3d Do.	919,317
Total and Averages, ...	3,283,301

9. In para 30, the traffic Manager has fallen into a singular error, when he says that all men, at all acquainted with the working of Railways, know that there are certain expenses that are "fixed and become arbitrary," such as direction and management, maintenance of permanent way, &c.; and adds thus, "if ten trains be run upon a Railway of equal mileage, the cost of such fixed and arbitrary charges become divisible on ten trains, but if one train only were run it must be charged to that one."

10. Strictly speaking, the expenditure in every department is more or less affected by the amount of business; but the great error here is in attributing to one train the same charge for "maintenance of permanent way" as for 10, that being a charge which, more than any other, depends upon the number of vehicles passing over the line.

11. In paras 33 and 34 Mr. Fletcher has fallen into another error, equally singular in its way, though of a different character. I quoted Belpaire to show how, on an increase in the amount of work, the cost of each unit of work is diminished; that with the stated increase of work on the Belgian line, the cost per 3rd Class passenger would be reduced from 3.4 pies per mile to 1 pie

12. On this (para 34) Mr. Fletcher exclaims, "100,000 carriages propelled in trains, &c., is to cost no more than 30,000 carriages propelled," &c. This is a most singular mistake for one studying the matter with any degree of care to have fallen into.

13. In the same para Mr. Fletcher alludes to Belpaire's "assumptions," adding, "I really do not know how assumption could be further carried."

14. He overlooks the difference—no slight one—between assumed data, and hypothetical conditions. Belpaire's *data* are all carefully and skilfully gathered from actual results.

15. According to Mr. Fletcher's mode of dealing with "assumption", we could never find the value of x , however clear and sufficient the data, since our calculations would be vitiated by our assuming there was such a thing as x to be valued; or to apply a still more homely illustration, it would be utterly unsound and unscientific to enquire—it having been clearly ascertained that a herring and a half cost three half pence—what two herrings would cost; unless it could be shown, not assumed, that the enquirer really contemplated making a purchase to the latter extent.

16. Another error into which Mr. Fletcher has fallen, the more serious, perhaps, because it does not look like an oversight:—He gives in para 138—quoting, it seems, from Lardner—the ratio existing between the mileage and receipts in England for each Class, in this, as in several other places, overlooking the far more important point of "profits".

17. For the relative receipts the table shows—

1st Class.....	1.00
2d Class.....	1.16
3d Class.....	0.63

and Mr. Fletcher adds, "may I not reasonably ask to which Class we may yield the palm as being the best customers of the Railway"? There is very imperfect reasoning in all this.

18. The receipts are as 1.0 for the first Class passenger, and 0.63 for the 3rd—true; but what are the expenses on each, and what the number of each? what, in fact, profits individual and aggregate?—It is here that Mr. Fletcher makes the grave mistake of saying, that when trains are run with 1st, 2d, and 3rd Class carriages attached, there would not be found any very great difference between the cost to the Company of the "cushion and blinds" and glasses, and additional elbow room to the first, as compared with the hard boards of the third! What! no difference in the cost of carrying a passenger, of whom there are 60 in the same carriage, and that of carrying one, of whom there are 24 in a carriage?

19. Is it thus that so important a point is to be argued and determined?

20. I trust and believe that the result of our Railway operations in India will amply suffice to disprove this. At present I must be content with another reference to Belpaire.

21. He gives, the following account of actual results on the Belgian lines.

Actual aggregate profit per myriametre realized from each Class.

1st - - - - -	Francs 18,863.22
2nd - - - - -	„ 28,524.99
3rd - - - - -	„ 25,660.95

The rates per myriametre were francs 0.71, 0.55, and 0.35, respectively, and we see here that the highest charged class did not give the greatest profit. Of the causes which led to the difference between the 2nd and 3rd not following the same law, as that between the 2nd and 1st there may be different opinions.

22. My own view is, that there, as in England, the lowest charge was not low enough to admit the mass of the poor. The charge for the 3rd class there is about 0·57 of a penny—the profits on each, per mile running, being about 0·34 of a penny, or more than half; and the aggregate profits on the lowest class, with this charge, exceeded that yielded by the highest class, and though it fell somewhat short of the 2nd class, yet amounted to 25,660 francs per myriametre open, or about 4,000 francs per mile open.

23. The reasoning in the latter part of para 56, in favor of a charge of 6 pies per mile for the lowest class here, I do not quite understand. Mr. Fletcher says, if therefore, the amount charged in Bombay, 3 pies, represents three farthings in Ireland, it is equal to 6 pies here; but the argument is somewhat obscure.

24. I shall only request attention to two other points.

1st. The remarkable opinion, given in para 155, that the rate proposed by him, viz. 6 pies per mile, would not be prohibitory to those who travel; or in other words, that he has succeeded in drawing a clear line between those who travel and those who do not; and it is to be found where the people cease to be able to afford to pay half an Anna per mile. Why if Mr. Fletcher will take a trip any new moon on his own rail, he will find ocular demonstration to the contrary. He will find many travellers of both sexes, but very few of them on the rail, though the charge is reduced to 4 pies per mile.

2dly. The 140th para of Mr. Fletcher's letter, in which, referring to my quotation from Lardner, to show how, on the introduction of the Parliamentary train, the number in the lowest class suddenly increased without prejudice to the others, he says that the statement, unless taken with the mileage receipt, is likely to mislead. In the first place I do not agree with Mr. Fletcher in this point, the object having been to show the proportion between the several classes. In the next place, the great increase in the total number of passengers, caused by the introduction of the Parliamentary train in 1845, is shown as satisfactorily in Mr. Fletcher's mileage statement, as in that which I extracted from Lardner.

I do not think this paper calls for any further remark.

(Signed) T. T. PEARS,

Consulting Engineer for Railways.

Madras, 15th December 1856.

TO THE CHIEF SECRETARY TO GOVERNMENT,
Fort Saint George.

Extract from Minutes of Consultation, dated 2d January 1857.

No. 1.

The Government concur in the remarks made by the Consulting Engineer in the above letter. They desire that these papers, with all the Correspondence that has passed on the subject of Railway rates and fares since July last, be printed at the Government Press, under the Superintendence of Colonel Pears, as a Supplementary Volume to that already printed.

(True Extracts)

(Signed) T. PYCROFT,

Chief Secretary.

No 5480.

FROM LIEUTENANT COLONEL W. E. BAKER,

Secretary to the Government of India.

To T. PYCROFT, ESQUIRE,

Chief Secretary to the Government of Fort Saint George.

Dated the 21st November 1856.

SIR,

Public Works Department,
Railway.

I am directed to acknowledge the receipt of your letter No. 326, dated the 2d ultimo, with inclosures, and in reply to state, that the Governor General in Council approves of the proceedings of the Government of Fort Saint George on the subject of the Passenger fares and Goods Charges on the Madras Railway.

I have &c.

W. E. BAKER, LIEUTENANT COLONEL,

Secy. to the Govt. of India.

FORT WILLIAM, }
the 21st Nov. 1856.

Extract from Minutes of Consultation, dated 13th December 1856.

No. 461.

Resolved, that copy of the above letter and of that to which it replies be forwarded to the Consulting Engineer for Railways for his information.

(True Extract.)

(Signed) T. PYCROFT,

Chief Secretary.

OUR GOVERNOR IN COUNCIL AT FORT SAINT GEORGE.

1. We have had under our consideration your letter No. 9, dated the 8th July last, and its enclosures, upon the subject of the scale of fares for the conveyance of passengers and goods on the Madras Railway.

2. The Consulting Engineer to your Government has elucidated his views in an able and elaborate memoir, in which he urges, as a paramount principle, that the Railway should be made available, to the utmost extent possible, for the mass of the people. We entirely concur in this principle; but at the same time we must not lose sight of another principle which should govern all questions of this nature, namely, the profitable working of the Railway. The general introduction of Railways into India can never be effected, until it has been demonstrated that they are a safe and profitable investment for capital; and we entirely agree in the opinion of the Governor General in Council that Government should be very cautious in adopting any measures of which "the obvious or even probable, tendency is, the diminution of Railway profits." This, it is contended by the Railway officers—not always, however, the judges in such matters most to be relied on—will be the effect of the present scale of fares. It will have been observed, by the correspondence which accompanied our dispatch in this department, No. 13, dated 20th May last, that we did not quite approve the tariff of charges proposed by the Directors in this country; we moreover think that such questions as these are better left for settlement in India. The Directors, however, entertained strong opinions on the subject; and having urged the adoption of their views, we allowed their instructions to their Agent to be forwarded, and the same to be carried out, as an experiment, with your concurrence. If after a short trial the rates fixed upon for passengers and goods, should prove too high, and consequently detrimental to the interests of the Railway Company, they can without difficulty be reduced. If on the other hand they are too low, and prove unremunerative, they must be raised.

3. The Fares now in use are,

	A. P.		
1st Class.....	1	6	per mile.
2nd do.....		9	do:
3rd do.....		4	do.

Those which the Railway Company were desirous of establishing were,

	A. P.
1st Class.....	2 0 per mile.
2nd do.....	1 0 do.
3rd do.....	0 5 do.

4. Any tariff now established must be experimental; and experience alone will enable a correct decision to be arrived at. But we should wish that the question of the 4th Class should be kept in abeyance until time has been allowed for forming a judgment on the expediency of the measure, grounded upon actual returns of Traffic.

5. With respect to the question of weights, &c., we forward copy of a despatch which we have lately addressed to the Government of India upon the whole subject.

6. We had much satisfaction in hearing that the line had been opened for traffic on the 1st July last.

We are your loving friends,

(Signed) W. H. SYKES,

ROSS D. MANGLES,
and other Directors.

LONDON,
19th November, 1856. }

(True Copy.)

T. PYCROFT,
Chief Secretary.

FINANCIAL (RAILWAY) DEPARTMENT.

No. 40.

Extract from the Minutes of Consultation, dated 23d January 1857.

Read the following despatch from Honorable the Court of Directors, dated 19th November 1856, No. 35.

Resolved that copy of the above despatch and of its enclosure be forwarded to the Consulting Engineer for Railways.

2. It is observed that the present passenger fares and rates for goods have, on the suggestion of the Government of India,* been adopted From Government of India, 23d May 1856, No. 2322. of one year from the 1st July last. The opinion of the Consulting Engineer will be asked on the rates and fares proposed by the

Railway Board, and as to whether there is reason to suppose that a change to them is necessary in consequence of the present rates being unremunerative, or would be of benefit to the Railway. Colonel Pears' remarks, with the views of Government thereon, will be laid before the Government of India in sufficient time to allow of their orders being received before the expiration of the year for which the experiment is to be tried, or by the 30th June next.

3. Copy of the Honorable Court's Statistical Despatch, 12th November 1856, will be furnished to the Board of Revenue for information as to any inquiries that they may be conducting on the question to which it relates.

(True Extract.)

T. PYCROFT,
Chief Secretary.

TO THE CONSULTING ENGINEER FOR RAILWAYS.

Extract from Minutes of Consultation, No. 55, dated 31st January 1857.

Communicated by the Honorable the Court of Directors, in their Despatch, No. 36 of 1856.

Para 3. In their letter of 16th October 1856, para 15, the Board of Directors, it is observed, state—"The Traffic accounts of the line, so far as they have been received, appear to be as favorable as under the circumstances was to be expected. With reference to the statement in your letter No. 167, that the Government, on receipt of Despatches from the Honorable Court, had suspended the introduction of a 4th class Passenger Train, but directed that in all other respects their orders issued respecting Traffic for Passengers and Goods were to remain in force, the Board have only to express their confidence that if the Tariff which has been fixed upon, and which they learn is regarded by the Court in the light of an experiment, should not appear to work satisfactorily, the Government will allow the scale of Fares recommended by the Board to be tried." It is remarked that the Consulting Engineer has recently been requested to report on the working of the present rates, and the expediency of substituting the scale alluded to by the Board, in sufficient time to allow of the orders of the Government of India being received, prior to the expiration of the year for which the existing rates are under trial.

(True Extract.)

(Signed) T. PYCROFT,

Chief Secretary.

LIST OF SELECTIONS

FROM THE

RECORDS OF GOVERNMENT.

PARTS ALREADY PUBLISHED.

1854.

	Rs. A.
1. Report on the Navigation of the Godavery.....	Royal 8vo... 1 0
2. Report on the Government Central Museum.....	do. ... 0 12
3. Report on the Proposed Abolition of the Madras Mint.....	do. ... 0 12
4. Report on the Paumban Channel.....	do. ... 0 8
5. Collective Memorandum of Public Works in the Madras Presidency.	do. ... 1 0
6. General Report of the Road Department.....	do. ... 1 0
7. Report on the Swinging Festival and Walking through Fire.....	do. ... 0 10
8. Report on the Proposed Plan for the Revenue Assessment of Kurnool in 1843.....	Royal 4to. ... 1 0
9. Report on the Important Public Works for 1851.....	Royal 8vo... 1 0
10. Do. do. do. do. 1852.....	do. ... 2 0

1855.

1. Report on Vaccination.....	do. ... 0 10
2. Memo. of Proceedings of the Madras Government in the Department of Education.....	Do. bound... 5 0
3. Report on the Navigation of the Godavery.....	Royal 8vo... 1 0
4. Major Maitland's School for the Instruction of the Artificers and Pupils at the Gun Carriage Manufactory.....	do. ... 1 8
5. Report of the Annamullay Forests	do. ... 0 8
6. Correspondence relative to Proposals for Organising Permanent Corps of Coolies for Employment on Road Works	do. ... 0 8
7. Report on Civil Dispensaries	do. ... 0 8
8. Report on District Roads	do. ... 1 4
9. Revenue Survey	do. ... 1 8
10. Operations of the Indian Mints	do. ... 1 8
11. Lieutenant O'Connell's Report on the Supply of Madras with Water, and the Improvement of the Drainage and Sewerage of Black Town.	do. ... 2 0
12. Reduction on the Revenue Assessment of North Arcot	do. ... 0 8
13. General Report of the Road Department for 1854-55.....	do. ... 0 12
14. Report on the Medical Topography of the South Western Political Districts	do. ... 0 4
15. Reports on Important Public Works for 1853	do. ... 1 4
16. Memorandum on Salt	do. ... 2 10
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