

*M. Hayward's Suggestions & notes on Valuation  
are attached also  
as dates of Car Construction -*

REPORT by MR. ROBERT DUNCAN re VALUATION of CARS.

22/8/16.

ROLLING STOCK.-

This I find in a condition which will render considerable repairs &c. necessary to ensure the running of the cars for any length of time.

The Company having refused to supply detail list of repairs provided for in their claim makes it impossible to say if their claims are reasonable, or not without getting a detailed report on all the rolling stock. I find that their costs of construction as prepared by the Company and placed before me showing labour and materials shows that in December 1915 the cost of the various car bodies and dummies was as follows:-

Bogie Cars.....	£ 382. 1. 8	each
Standard Cars....	211.11. 0	"
Dummies .....	169. 9. 2	"

Considering the last Bogie Cars they built outright was in 1906 their claim that the Bogie Cars cost £382. 1. 8 in 1915 is only an estimate, taking into consideration the increased cost of materials and labour. The last Bogie Cars put on the road in 1914 were constructed by joining two shorter cars together, so they cannot be reckoned as newly made cars.

The last Standard Cars were made in 1913, and here again, their claim that the car cost £211.11. 0 each in December 1915 is only an estimate, and the last Dummies were built in 1912, and the same consideration applies to them.

These costs are considerably more in my opinion than the costs would have been in June 1914 or before the War, and their claim with the deduction they propose for necessary repairs brings the figures out at a higher cost than the original cost, or in other words they claim more than the original costs of the cars after having in some cases used the cars for 25 to 30 years.

The costs of the cars in 1915 are inflated on account of high prices of materials and labour.

I find the following cars and dummies have been built since 1898, and the years of construction:-

Bogie Cars.- 12 were built in 1901 by joining two smaller cars together: 18 in 1902; 12 in 1903; 8 in 1906; and 6 in 1914; these were built by joining smaller cars together making 18, and a total of 56 Bogies.

Standard Cars.- 10 were built in 1900; 10 in 1901; 18 in 1907; 12 in 1911; and 24 in 1913, making a total of 74 Standard Cars.

Dummies.- 10 were built in 1906; 20 in 1907; 20 in 1912; making a total of 50.

We find that the majority of their rolling stock was built before 1898.

Similar car bodies to the standard car body could have been built for about £140 in 1888, and there was no material increase in wages up to 1898, so that should be taken for the cost of car bodies in 1898. The increases in labour would make a difference of about 8½% in 1903; 13% in 1909; 32% in 1913, 52% in 1915, taking it in five year stages.

Materials would increase about the same ratio for 1915, but in a good many instances a substitute costing about the same (and sometimes less) as the original materials used could have been used, and only a few items which could not be substituted such as white lead, oil, iron and steel would have to be used.

Labour on one of these cars used to cost in 1888 for milling £ for smithing £ for Body making £ and for painting £ making a total of about £ 52/4/2.

Materials would cost about £66.1/-.

20% factory burden must be added - £23.13/-.

The Cars as I have reported before in my opinion will be

52.4.2  
66.1.0  
23.13.0  
141.16.2

25% of 141.16.2 each

superseded by a more up-to-date system within ten years, so if we take their life at forty years, considering they are about thirty years old, and no improvement or alteration in design except in the bogie cars has taken place, they have only one fourth of their life left, that would leave their value one fourth of their original, or about £37 plus a residual value.

Another, and I think a better way to arrive at the value is to view them from a business standpoint. I have said that ten years is the most in my opinion that the general public will tolerate this slow system of <sup>street</sup> traffic. Now a business man would look at it from this view - within ten years these must be wiped out altogether. They have a certain residual value at the end of that period, and I must provide for their cost to be reduced to that amount in the ten years. I have fixed the rate of writing down at ten per cent on the diminishing value. One inducement for me to fix ten per cent is that it is the largest amount allowed by the Income Tax Commissioner. Writing off this ten per cent each year for ten years to leave a residual value of £20 for the Bogie Cars - £15 for Standard; and £10 for Dummies we arrive at a value of £57.7/- for the ~~xxxxxx~~ Bogie Cars, £43 for the Standard Cars, and £28.13/- for the Dummies.

If we reckon along another recognised way of arriving at the value of plant &c. we could fix a rate of depreciation of 2%, and for obsolescence of 3%, making a total of 5% on the diminishing value it would bring the values, reckoning on the values the Company put on the stock down, as per schedule attached.

#### OTHER PLANT AND MACHINERY.-

This must be classified under different heads such as fixed Machines, and Power Transmitting Plant.

Fixed Machines of general usefulness such as Lathes, Drilling Machines, and the like have a high residual value, because of their general use and application, and I would fix

this value at 40% on the original cost if in good running order, and add the cost of installation to their value, and the value of the car transmitting portion of the plant, such as shafting pulleys, plumber blocks, and the like at 50% of the original value, plus cost of installation.

Belting and the like should be reckoned as having a life of ten years, and should carry a depreciation rate to replace same each ten years. This must be reckoned on an average, because you will get exceptional cases where belting has run on the same machine for thirty years, but it is not the exceptional value we are looking for.

PATTERNS.- These are costly to produce, but the usefulness is gauged by the convenience of getting a replacement for a broken or worn out part quickly, but as in my opinion this means of street traffic must be superseded by some other more up-to-date system, their useful life is only ten years, and are therefore worth only about one fourth of their original value. Their residual value will be nil, because the only business to which they are of any use is Cable Trams, and they will be, if my contention is correct, out of existence in ten years' time.

TOOLS.- I would value the tools in use in the workshops at one third their original value. That would include all tools that were of use - this is an average that would work out at about a fair thing. If each tool is valued separately one would have to discard a lot of tools that are almost worn out, although they had a certain amount of usefulness left, but would require work to be spent on them and then would not be quite as handy as less worn ones.

RE STORES AND SPARES.-

I reported before that I could not judge if these stocks were too great without getting some information in regard to the quantity of repairs that are put through each year. In regard to

the stores that are suitable for repairs, we should get these at invoice value. This would give the Company their discount which would be really a buying Commission.

Judging from the stocks of spare parts of rolling stock one would form an opinion that considerable repairs are carried out or that the quantity of spare parts is unduly large? This is another case where it is essential to know the amount of repairs and replacements that are necessary per year..

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£ 57. 7. 0	
<u>5.14. 8½</u>	(1)
51.12. 3½	
<u>5. 3. 2½</u>	(2)
46. 9. 1	
<u>4.12.11</u>	(3)
41.16. 2	
<u>4. 3. 7</u>	(4)
37.12. 7	
<u>3.15. 3</u>	(5)
33.17. 4	
<u>8. 7. 9</u>	(6)
30. 9. 7	
<u>3. 0.11</u>	(7)
27. 8. 8	
<u>2.14.10</u>	(8)
24.13.10	
<u>2. 9. 4</u>	(9)
22. 4. 6	
<u>2. 4. 5</u>	(10)
<u>20. 0. 1</u>	

£ 43. 0. 0  
4. 6. 0 (1)  
38.14. 0  
3.17. 5 (2)  
34.16. 7  
3. 9. 8 (3)  
31. 6.11  
3. 2. 8 (4)  
28. 4. 3  
2.16. 5 (5)  
25. 7.10  
2.10. 9 (6)  
22.17. 1  
2. 5. 8 (7)  
20.11. 5  
2. 1. 1 (8)  
18.10. 4  
1.17. 0 (9)  
16.13. 4  
1.13. 4 (10)  
£ 15. 0. 0

£ 28.13. 0  
2.17. 3 (1)  
25.15. 9  
2.11. 7 (2)  
23. 4. 2  
2. 6. 5 (3)  
20.17. 9  
2. 1. 9 (4)  
18.16. 0  
1.17. 7 (5)  
16.18. 5  
1.13.10 (6)  
15. 4. 7  
1.10. 5 (7)  
13.14. 2  
1. 7. 5 (8)  
12. 6. 9  
1. 4. 8 (9)  
11. 2. 1  
1. 2. 2 (10)  
£ 9.19.11

1886	£ 210. 0. 0	£ 382. 0. 0
1887	199.10. 0	362.18. 0
8	189.10. 6	344.15. 1
9	180. 1. 0	327.10. 4
90	171. 1. 0	311. 2.10
1	162.10. 0	295.11. 7
2	154. 7. 6	280.16. 0
3	146.13. 2	266.15. 5
4	139. 6. 6	253. 8. 8
5	132. 7. 2	240.15. 3
6	125.14.10	228.14. 6
7	119. 9. 1	217. 5.10
8	113. 9. 8	206. 8. 7
9	107.16. 0	196. 2. 2
1900)		
1		
2	91.12. 7	166. 3.10
3	87. 1. 0	157.17. 8
4		
5		
6		
7	73.19.10	134. 4. 1
8	70. 5.10	127. 9.11
9	66.15. 7	121. 2. 6
10	63. 9.10	115. 1. 5
11	60. 6. 4	109. 6. 4
12	57. 6. 1	103.17. 1
13	54. 8.10	98.13. 3
14	51.14. 5	93.14. 7
15	49. 2. 9	89. 0.11
16	46.13. 8	84.11.11
	44. 7. 0	80. 7. 4

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1886	£ 167.10. 0
7	159. 2. 6
8	151. 3. 5
9	143.12. 3
90	136. 8. 8
1	129.12. 3
2	123. 2. 8
3	116.19. 7
4	111. 2. 8
5	105.11. 7
6	100. 6. 0
7	95. 5. 9
8	90.10. 6
9	86. 0. 0
1900)	
1	
2	73. 2. 0
3	69. 8.11
4	
5	
6	
7	
8	
9	
10	59. 0. 7
11	56. 1. 7
12	53. 5. 6
13	50.12. 3
14	48. 1. 8
15	45.13. 7
16	43. 7.11
	41. 4. 7
	39. 3. 5
	37. 4. 3
	35. 7. 1