

VALUATION OF CARS.

SECRETARY'S SUGGESTED BASIS OF VALUATION.

STANDARD CAR.

Assumed Facts -

- (a) Cost New 1916..... £210. 0. 0
- (b) Total useful life.. 60 years.
- (c) Cable system to be discarded in 10 years.
- (d) Scrap value..... £ 10. 0. 0

CONSIDERATIONS.

In valuing the cars, regard should be paid to both Depreciation and Supersession (Obsolescence), but the method of giving effect to these principles is entirely different.

DEPRECIATION.- Assuming a useful life of 60 years, an annual depreciation of  $1\frac{2}{3}\%$  per annum should be written off the "cost new" each year.

For example - A Standard car has been in use 25 years.

|  |                    |
|--|--------------------|
| Cost New....                                 | £ 210. 0. 0        |
| Deduct $25 \times 1\frac{2}{3}\%$ of £ 210 = | <u>87.10. 0</u>    |
| Leaving a present "use" value of ....        | <u>£ 122.10. 0</u> |

This is on the assumption that the cable system will continue for 35 years longer.

SUPERSESSION.- The present value of this Car is thus £122.10/- provided the Tramways continue to be worked as cable tramways for 35 years longer. As however, it is assumed that the system will be scrapped at the expiration of 10 years, it is necessary to ascertain the Present Value of an asset worth £122.10/- in 1916, the value of which will, in 1926, be reduced to £10. I think this should be determined by estimating the "present value of its future 'use' or earning value, plus its scrap value".



The "earning or use value" of a car is approximately the interest and Sinking Fund on the sum required to manufacture a new car; because unless a car can earn the interest and Sinking Fund on its Capital cost it will not pay to purchase it.

ReHo. The Board is at present building 10 new Dummies and it is assumed that these dummies will earn the interest and Sinking Fund on their Construction cost.-

The annual interest at 5% and Sinking Fund at  $1\frac{2}{3}\%$  on the present value of the Car viz. £122.10/- is £8.166 which represents the approximate annual profit the Car should earn to pay its way.

The value of the Car, allowing for depreciation and supersession will therefore be the present value of an annuity of £8.166 for 10 years, plus the present value of £10 Scrap value due 10 years hence.

|  |                                |                 |
|--|--------------------------------|-----------------|
| Present value of £1 per annum for 10 years @ 5% is |                                |                 |
|  | £7.721 x £8.166                | = £ 63.049      |
| do. of £10 payable 10 years hence..                |                                | <u>6.139</u>    |
|  | Present value of the Car ..... | <u>£ 69.188</u> |

Under this scheme, I do not think we should require the Company to compensate the Board for repairs accrued to date.

LOGIE CAR. (10 years old)

|                      |  |                   |
|----------------------|--|-------------------|
| <u>Assumed Facts</u> |  |                   |
| (a)                  | Cost New 1916....                                  | £380              |
| (b)                  | Total useful life..                                | 60 years,         |
| (c)                  | Cable system to be discarded in 10 years,          |                   |
| (d)                  | Scrap value.....                                   | £20.              |
| <u>Depreciation:</u> |  |                   |
|                      | "Cost New" 1916.....                               | 380. 0. 0         |
|                      | Deduct Depreciation @ $1\frac{2}{3}\%$ of £380     |                   |
|                      | x 10 years =                                       | <u>63. 6. 8</u>   |
| <u>Supersession:</u> |  |                   |
|                      | Annual Interest 5% & Sinking Fund $1\frac{2}{3}\%$ | £ 316.13. 4       |
|                      | on £316.13. 4                                      | =                 |
|                      |  | <u>£ 21. 2. 3</u> |
|                      | Present value of Annuity of £ 21/2/3               |                   |
|                      | for 10 years = £7.721 x £21.1                      | =                 |
|                      |  | £ 162.913         |
|                      | Present value of £20 payable 10 years hence        | <u>12.278</u>     |
|                      | <u>Present Value of the Car</u>                    | <u>£ 175.191</u>  |