Per Bus-

INCOME STATEMENT

Operating revenues	Total \$5,458.66	Mile (Cents) 21.56	
Wages of bus operators and repairmen Gasoline—3,625 gal. at 26 cents Oil—188 qts. at 20 cents Tire allowance. Insurance. Depreciation.	2,162.00 942.50 37.60 761.40 282.00 2,030.40	8.53 3.72 0.16 3,00 1.13 8.00	
Total operating expenses	\$6,215.90	24.54	
Deficit from operation Taxes Interest	\$757.24 100.00 225.00	2.98 0.40 0.89	
Net loss from bus operation. Saving on trolley car operation, 140 miles per day at \$35 per day.	\$1,082.24 3,290.00	4.27 *25.00	
Net revenue from operating buses	2,207.76	8.72	
Bus-miles operated. Average miles per gallon of gasoline Miles per quart of oil. * Per car-mile (trolley).	25,385 7.0 135.0	*****	

operated was 25,385, equivalent to 135 miles per bus per day. The earnings per bus-mile thus average 21.56 cents.

The cost of operation of the service rendered for the same period, which covers not only the wages of repairmen and operators, gas, oil, etc., but overhead

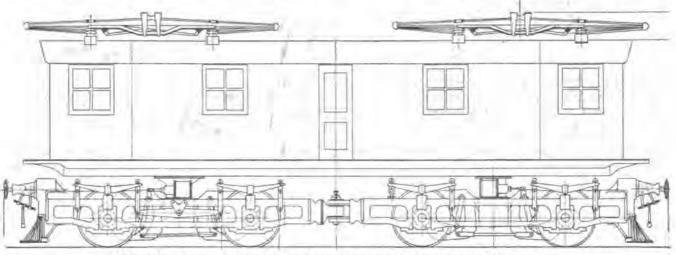
operating costs. The accompanying income statement shows the results in total and per bus-mile operated for ninety-four days' operation commencing Nov. 4, 1919.

Paulista Railway Electrification

Line in Brazil Having 28 Route Miles Will Be Equipped for Operation at 3,000 Volts, Direct Current

THE double-track line of the Paulista (Brazil) Railway, between Jundiahy and Campinas, will be electrified at once, on the 3000-volt, direct-current system. The route mileage is 28, the total length of single track involved being 76 miles. A later 100-mile extension from Jundiahy to San Carlos is contemplated.

The locomotives will be of the geared type and these and the overhead construction will be designed after the models furnished by the Butte, Anaconda & Pacific and Chicago, Milwaukee & St. Paul Railways. The locomotives will be similar to those used on the former, as will be seen from the accompanying illustration, but they will be furnished with regenerative braking control. There will be eight freight locomotives weighing



SIDE ELEVATION OF 100-TON ELECTRIC FREIGHT LOCOMOTIVE FOR BRAZIL

expenses, including really a larger depreciation reserve than necessary, indicates that the buses were run at 25.73 cents per bus-mile. In these costs depreciation is figured at 8 cents per bus-mile, which would extinguish their initial cost of \$4,800 at approximately 60,000 miles. It is fair to say that this rate of depreciation is high and does not consider the scrap value of the bus, nor does it take into account the fact that the automotive power plant depreciates faster than the rest of the equipment.

Another factor to be considered by the company is the net cost of operation of the property as a whole, for as the result of the bus operation there was a saving of 140 trolley car-miles per day between Greenfield and Turners Falls. If only the actual cash expenditures of \$35 per day to provide this car mileage is considered, added to the net income from the bus operation, the result would be then a fair surplus instead of a deficit, as would be the case if the bus operation was considered as standing alone. Then too, the daily bus earnings show an upward tendency, and it must also be remembered that for a part of the period of operation heavy snows materially increased 100-tons each, with all weight on the drivers, and four 120-ton passenger machines with two guiding axles at each end.

The locomotives, overhead contact and transmission line material and substation equipment will be furnished by the General Electric Company. Power for operation will be furnished at 88,000 volts, 60 cycles by the Sao Paulo Light & Power Company.

Accident Fatalities in Cleveland

I N commending the work of the local Safety Council, Dr. H. L. Lockwood, Health Commissioner of Cleveland, Ohio, has given to the council the following data (see National Safety News, March 22):

ACCIDENTAL FATALITIE DURING	8 OCCUI		CLEVEI.A	ND
	Jan. 1 to June 30,	Jan. 1 to June 30,	July to Dec. 31,	July to Dec. 31,
Railrosda Street cars	16	1919 22 9 63 4 11	1918 29 22 143 8 27	1919 27 23 73 10 12
Total	117	109	229	145

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