

VALUING PHYSICAL PROPERTY OF UNITED STATES RAILROADS

Board of Engineers in Charge of Work Have Pullman Cars Which Average About Two and a Half Miles a Day.

Upon the physical valuation of railroads, which is at present being undertaken in the States at the instance of the Interstate Commerce Commission, Mr. Anson M. Cole contributes the following article to the Boston Transcript:

The providing of remodelled Pullman cars as moving quarters for the roadway parties engaged in the great task of valuing the physical property of the railroads of the United States recalls the scheme of a waggish householder who proposed to set up a kitchen bar-room to keep the kitchen fire from going out of nights.

The board of engineers of the commerce commission has really done it. It has bought from the Pullman Company coaches for each valuation district, and has remodelled the cars until they are obviously comfortable—has provided them, among other strange luxuries, with clothes closets and shower baths. Each of these admirable private cars houses an enthusiastic party of ten civil service employes, plus two servants.

The speed of these cars is reported to average about two and a half miles a day. As yet they have not been much in evidence in the eastern part of the country; but we here folks may yet have our chance to see the Boston-New York run reeled off in something like 100 days. Let us hope that it will come to pass; for that is about the only satisfaction to be expected from an expenditure, through the Government and the railroads, which would give every family in the country a better show at a first-class variety house.

Providing Pullman Cars.

The serpent-like wisdom which perceived the necessity of Pullman cars for the roadway parties was acquired in the Texas campaign. In the winter of 1914. It had been assumed at the outset that the roadway parties could find lodgings in the settlement of Texas, and something to eat that would enable them to keep the coyotes off of their notebooks and theodolites while they were counting the ties and the fence-rails and fence-posts and estimating the value of stray coupling pins and fishplates.

Also that the road parties could use the regular trains to get them to the successive sections of the track that they were to verify. This proved to be utterly without foundation in fact. The hardships involved were almost as great as though the men were actually building the track instead of merely counting it and writing it down for the two computers of each party to add up. Good men, it was perceived, could not be held to permanent work under such conditions. Pullmans resulted.

That the decision was a wise one, from a practical point of view is hardly to be questioned. Food and lodgings available were for the most part distinctly bad. Local train schedules made anything like a uniform length of working day impossible. There was good reason to expect continual changes in the personnel of the various parties from the dissatisfaction and occasional sickness that such poor living conditions occasioned.

A movable headquarters, which could keep the workers in comfort and follow close upon each day's work was the obvious solution, and the board adopted it. If the work had to be done in the minute way in which it actually is being done, the system adopted is probably economical in that it secures continuous work under conditions which make efficient work almost a certainty.

Describing Remodelled Pullmans.

Diagrams of the remodelled Pullmans indicate that they must be comfortable. About in the middle of each 64-foot car one of the original double seats, and two facing single seats have been left on each side of the car. Toward one end of the car from the middle section comes first the dining-room with an extension table at which the whole party of ten can eat together; still further along comes the commissariat, provided with a range, sink, closets, china shelves, refrigerator. There are two single seats in this section, presumably for the cook and the laborer who accompany each party. In one side of the dining-room, it should be added are four berths.

Toward the other end from the middle seat section come, first, lockers and a clothes closet with hangers; then the lavatory and shower-bath and at the opposite end of the car from the kitchen, the office, with three berths and a drawing-board that folds up or down. Evidently berths are made up at night in the central seat section.

Occupants of these berths, while the car is racing forward two miles and a half to the next day's work, doubtless receive a stimulating impression of rapid progress. It is understood that the party occupies these berths in rotation during train movements for the effect on the morale of the party. Within these assuredly comfortable quarters the party takes only the two comforts of bad language and tobacco smoke, both being forbidden by civil service or other regulations. The chief of the party is allowed \$1.50 and the other members \$1 a day for food, water, washing and other incidentals, in addition to the regular salary of each man.

Pays Regular Passenger Fare.

The chief of the party is the housekeeper, who keeps the accounts and buys all the food and water. The laborer attached to the party pays for his keep out of his \$2 a day. No specifications are at hand in regard to the cook; nor as to the representative of the railroad who accompanies each party to make sure that no tie is left unreckoned, and no fence-rail charged too heavily for depreciation. When a car is moved, it is upon at least 24 hours previous notice from the chief of party to the railroad, specifying the station from which and the station to which the party will advance; sometimes a side-track between stations proves most convenient for the prosecution of the arduous work. For such movements of the car, each man pays the regular passenger fare, or some proportionate and equitable portion of the fare when the destination is a siding not used for regular passenger stops.

Besides this the commission will some time decide what is a reasonable charge for the railroad to make for moving the car. It has not yet reached a decision, possibly because it is difficult to see why after paying fares for 12 men, the Government should pay an additional charge for the movement on which the fares are collected. The mathematical relation of the aggregate fares of 12 men for a run of five miles at 2 1/2 cents per mile to the average switching charge under the same conditions presents a problem certain to arouse the lively interest of all serious students of the theory of rate-making.

Daily Routine of Computers.

Having been moved from yesterday's completed work to the next bit with the great care enjoined in such cases upon the operating department of the

The Charter Market

(Exclusive Leased Wire to Journal of Commerce.)

New York, February 10.—The full cargo steamer market continues strong and rates are slowly advancing in all trades, due to the scarcity and light offerings of boats for all kinds of business.

Tonnage is in demand for trans-Atlantic, West India, South America and long voyage business, but charterers find it decidedly difficult to secure tonnage even at slightly higher rates than those recently paid for similar business.

For sailing vessels there is also a considerable inquiry from offshore shippers, principally for lumber and coal cargoes, but also for sugar from Cuba ports north of the Hatteras.

Rates in all cases are strongly sustained and tend higher, and suitable vessels are sparingly offered.

Coastwise freights are comparatively scarce, but the tendency of rates is better.

Charters—Grain—Norwegian steamer Bra Kar, 32,000 quarters, from the Atlantic Range to Copenhagen, 13s. 6d., March.

Norwegian steamer Sigrun, 16,000 quarters, same, to Denmark, 14s., March.

Norwegian steamer Finn, 26,000 quarters, same, to Scandinavian ports, p. t., prompt.

Norwegian steamer Liv, 19,000 quarters, same, February-March.

Swedish steamer Borg, 15,000 quarters oats, same, to the Gulf of the River Plate, 20.

Lumber—Schooner Vanlear Black, 546 tons, from the Gulf to the River Plate, 20.

Schooner Coniscliffe, 342 tons, same.

Russian schooner Lembit, 285 tons, from Mobile to West Britain with timber, p. t., prompt.

Miscellaneous—Steamer Ruth, 2,428 tons, from Cuba to North of Hatteras with sugar, p. t., February.

Schooner Kenwood, 797 tons, from Cienfuegos to North of Hatteras with sugar, 20 cents.

BALDWIN LOCOMOTIVE CO.

Philadelphia, February 10.—Rush orders have been received by Baldwin Locomotive from the French government for 100 locomotives.

It is estimated that the contract will amount to approximately \$2,000,000.

PRINCE RUPERT DRY-DOCK.

Prince Rupert, February 10.—It is expected that the 20,000 ton dry-dock at Prince Rupert will be completed by June 1. Seven of the twelve pontoons have already been launched at the rate of one a month.

railroad, the party arises and gets up at 6 or 6.30, depending on the darkness of the morning, takes a cold shower and a hot breakfast, makes up the beds and sweeps out the car. Then, in four groups it attacks the day's work, which needs a word of explanation.

This party in the Pullman is concerned exclusively with the road—and the fences alongside thereof. There is a land department, which values the land comprised in the right of way. The larger structures, such as stations, freight-houses, bridges, are valued by the structural department, the rolling stock—meaning cars and engines—by the mechanical department and telegraph poles and wires by the electrical department.

The eight men of the Pullman party who actually go out of doors divide into three parties; namely, the chaining or length-measuring party, of three; the ballast group, which is made up of the chief of party, the laborer and the representative of the railroad; and the cross-section group, which measures cuts and fills. The computer and the assistant computer stay behind in the car and figure out the answers to yesterday's work. The division among the three outside parties is flexible, all hands turning to help each other when needed.

Lengths of Various Tracks.

In the course of the day they measure the lengths of the various tracks, count every tie, every rail, every frog (it is difficult to understand why the tadpoles are omitted), every fence-post, every fence-rail or board. Little ditches are cut across the ballast under the ties, when there is any, and its depth and width are noted at intervals for the later occupation of the computers. Variations of half an inch in successive stretches of ballast are averaged off-hand. Fractions in the field measurements are not carried finer than two decimal points, the subsequent extension to seven points being left to the computers, who are assisted on rainy days (when outside work is prohibited) by the rest of the party.

The representative of the railroad is excused from the computing work, though he is allowed to make private calculations on his own responsibility. On such rainy days, also, the laborer is employed in serving the comfort of the party by doing odd jobs about the car, such as sharpening pencils, and smoking for the benefit of the party on the platform outside the office section of the car.

It should not be omitted that dinner is served every night in the car; also luncheon at mid-day unless the field party is too far away; in that event the laborer or the cook takes something to eat out to the workers. The working day is eight hours long, not including the time required to walk to and from the car.

Waste of It All.

Evenings are spent in reading and amusements of various sorts, liquor and gambling being barred, along with the smoking and bad language hereinbefore enumerated. On Sundays there is usually a chance for those who wish it to go to church. During the Saturday half-holidays of the three summer months many of the parties have formed ball teams which have played against local teams of the villages where the cars happened to be.

Another possible amusement is being absent for sickness for thirty days in each year without loss of pay; too little time has elapsed to estimate the popularity of this outlet. Circulating libraries are being provided; also emergency medical cabinets and mutual relief associations.

Valuation of the physical property of the railroads may or may not be worth while, but the methods employed for the roadway work are so grossly unscientific as to make the man of practical sense hold up his hands in horror. The average number of ties to a mile of track is already well known to every railroad engineer. A man who knows anything about ties can inspect and value with all the accuracy that is humanly possible at least ten miles of ties in a day; and that is setting a very low measure.

To count those ties and the equally well known average of rails per mile, and to turn the daily count over to two computers, and to figure depreciation on them, and replacement value, and only the deluded commission knows what else is a travesty on common sense, a mockery of efficiency, a rank waste of public money. At the rate the work is going, the ties and fences of to-day will have been replaced with new by the time the rising flood of hopelessly inaccurate computations reaches the gates in Washington.



MR. H. L. DRAYTON, Chairman Railway Commission. Mr. Drayton announces that the application of the railroads for a rate increase on Eastern Lines will be heard on March 1st.

SHIPPING NOTES

The United States ammunition ship Leanon is carrying 112 turbine torpedoes to the Atlantic fleet.

On a trial trip, the battleship Olympia, Dewey's flagship at Manila, ran aground near Charleston, S.C., but was floated unharmed.

A large bell is to be re-erected by the marine department on the eastern side of Digby Gut for the guidance of shipping entering from the Bay of Fundy in thick weather.

The steamship Dacla, loaded with cotton from Galveston for Rotterdam, did not leave Hampton Roads. It was said last night the vessel probably would sail this morning.

The Norwegian steamer Imataca, Ayr, Scotland, for Baltimore, was abandoned in the middle of the Atlantic in a sinking condition and her crew taken off by the steamer El Zorro.

Mr. C. E. E. Ussher says that he expects to see a great many Canadians attend the Panama Pacific Exposition. Being open all the year, however, there are not likely to be any great rushes.

The Pannonia, the Hellig Olav and the Re d'Italia have arrived at New York; the Haverford is at Philadelphia; the Transylvania at Liverpool; the Minnewaska at London and the San Guglielmo at Naples.

New York Post Office returns show that the steamship New York which sailed on Saturday, carried a record European mail for this season. There were 5,619 bags of letters and 417 sacks of parcel post matter.

The steamer Balboa of the American-Mexican Trading Co. of San Diego, has been admitted as the 124th vessel to American registry, bringing the total gross tonnage registered, under the emergency act of last August, to 455,635.

It was reported yesterday that the Standard Oil Company had finally arranged with the Portuguese Government for permission to raise the American flag on the German tank steamer Excelsior and Hohlcann. The steamers will be re-named Petrolite and Corning, and will proceed to New York as soon as American crews can be provided.

The captain and the thirty-two members of the crew of the tank steamer Chester, which was wrecked in mid-ocean on the night of February 4, were brought to New York aboard the steamer Philadelphia of the American Line, which arrived at Quarantine from Liverpool yesterday. Three of the crew were in the Philadelphia's hospital. No lives were lost.

In a statement submitted by British ship owners to the London Board of Trade, it was pointed out that the overseas trade of England has been reduced by about 30 per cent; the overseas trade of Germany, Austria-Hungary and Belgium (about 22 p.c. of world trade) has vanished, and the shipping of Germany and Austria-Hungary, representing 14 p.c. of world's shipping has been withdrawn entirely. The Admiralty is employing about one-fifth of the British tonnage, or 10 p.c. of the merchant ships of the world. Altogether the overseas trade of the world has been reduced by about 20 p.c.

Judgment for £466, balance of contract price due for transporting an icebreaker from Smith's Dock, on the River Tees, to Quebec, was given Rea and Company, at Liverpool, yesterday. The icebreaker was constructed for the Harbor Commissioners of Quebec at a cost of £18,500 by Smith's Dock and, when built, the plaintiffs entered into a sub-contract to deliver the vessel. The plaintiffs transported the vessel with the understanding that they would receive certain monies retained by the Commissioners, but the latter refused to pay a total of £2,000 on account of the claims for damages through delay. The judge held that the plaintiffs had been prevented from securing the money on account of the defendants' acts, hence the judgment for the former.

SOLD DOWN 32 POINTS.

New York, February 10.—Atlantic Refining sold at 57, off 32 points, now quoted 565 to 573.

NOVA SCOTIA CAR WORKS IN SEARCH OF LIQUID CAPITAL

Halifax, N.S., February 10.—The Nova Scotia Car Works, Limited, found itself, at the annual meeting in the unhappy position of having a number of pressing claims from creditors and no liquid capital wherewith to meet them.

Banking assistance can be had if 50 per cent of the creditors agree to an extension of time, but only 85 per cent at present have so agreed.

The statement of liabilities showed \$54,500 due to the bank and bills payable \$61,301.

It was understood that no creditor would be allowed to have any preference and that if the company is to go into liquidation this shall not be allowed to be at the instance of any one creditor, but in the interest of the company and creditors alike.

Alfred Dickie was appointed a director in place of the late J. R. Lamy and the others of the old board were re-elected.

RAILROAD NOTES

Walter R. Strickland, whose death is reported at Toronto, was the designer of the much discussed union station at that centre.

Chester W. Witters, vice-president of the Central Vermont Railway and for many years its attorney, died of pneumonia. He was 79 years of age.

Four men were arrested near Stuart, Fla., and are being held in connection with the holding up of the Palm Beach Limited from Jacksonville to Miami.

Railroads of Pennsylvania and New Jersey have opened a campaign to get full crew laws repealed in those States. They announce a purpose to submit the matter to the people by a frank presentation of the facts.

Contracts for the construction of one hundred narrow gauge locomotives for military use have been received by a Philadelphia concern from the French Government. In making the announcement an official of the company said the locomotives will cost approximately \$400,000.

Orders for rails actually placed by N. Y. Central lines for early 1915 delivery total 57,000 tons to date, with reservation made at the mills for May, June and July rolling of 13,500 additional tons. All these rails are open hearth, specially rolled to specifications prepared by the N. Y. Central system's metallurgist.

A bill providing for the reorganization of the Boston and Maine Railroad by the amalgamation of the parent company and the subsidiary lines operating in the state was laid on the table by the Vermont State Senate pending an investigation of the possibility that a transportation monopoly might be created by its passage.

Mr. W. R. MacInnes, freight traffic manager of the C. P. R. believes that important interests in Canada, among manufacturers and other sections of the community, will be found to favor an increase in freight rates in the Dominion when it has been demonstrated that the railroads have pressing claims for the increases that are sought.

The Auditor-General in his report takes objection to the issue of what he described as a loan of \$2,500,000 each in Dominion notes, to the Canadian Northern and Grand Trunk Pacific Railway. The Auditor-General objects that neither of these advances was authorized by Parliament, the proceeds of this issue not having been placed to the credit of the consolidated revenue fund.

The Dominion Railway Commission has refused two applications from the Fort William Board of Trade, one an application for a reduction of 2 1/2 cents per hundred pounds in the C. P. R. rate for shipments westward originating at Fort William, and the other a complaint against the switching charge of the C. P. R. between its dock and railway sidings, viz. one cent per hundred pounds with a carload minimum of \$5.

The new bridge constructed by the C. P. R. at Sault Ste. Marie is one of the largest of the bascule class in the world. It is 356 feet long between the centres of the piers, and 338 feet between trunnion and trunnion. It has two folding leaves, which open so as to permit the passage of vessels in the canal. The weight of structural steel in the bridge is 1,400 tons, and each of the two bascule leaves with its floor system weighs 400 tons.

Mr. Grant Hall, vice-president and general manager in charge of the Western lines of the C. P. R., has just made his first trip of inspection since his promotion to the vice-presidency. Progress on the Kootenay Central line and the Rogers Pass tunnel is good. The latter project, he believes, will be completed in two years. He also stated that the Kettle Valley line would be operated as far as Merritt during the present year. Double-tracking work on the British Columbia division is being proceeded with.

Mayor Bowness of Cranbrooke, B.C. recently stated that he had information from a reliable source that the C. P. R. was buying huge acreage in the Kootenay Valley at the present time with the idea of colonizing. They had been working on the subject for some time, and several colonies of settlers, would be brought in the near future to this district by the C. P. R. They were not only bringing in new people, but they were preparing to give them assistance until such time as they could establish themselves on a profitable basis.

RUSSELL MOTOR CAR CO.

Toronto, Ont., February 10.—Mr. C. R. Burt, for the past year and a half factory manager of the Russell Motor Car Co., has been appointed Assistant General Manager and elected to the directorship made vacant by the resignation of Mr. J. E. Rogers. It will be remembered that Mr. Burt conducted certain tests in February, 1914, in which a Russell engine established many world records.

MICHIGAN CENTRAL RAILROAD.

New York, February 10.—Michigan Central Railroad has sold \$4,000,000 first mortgage 3 1/2 per cent bonds due in 1925 to W. A. Read and Company. The issue of \$1,000,000 Wisconsin Central 3-year 5 per cent notes guaranteed by Soo Line has been privately placed by the same firm.

CANADA TOOL SPECIALTY.

New Glasgow, N.S., February 10.—The order for 509 rifle sights from the Ross rifle people is being started upon by the Canada Tool Specialty here.

JUDGEMENT FOR TRANSPORTING AN ICEBREAKER TO QUEBEC

London, February 10.—Rea and Company, have secured at Liverpool judgment for £466, balance of contract price due for transporting an icebreaker from Smith's Dock, on the River Tees, to Quebec.

The icebreaker was constructed for the Harbor Commissioners of Quebec at a cost of £18,500 by Smith's Dock and, when built, the plaintiffs entered into a sub-contract to deliver the vessel. The plaintiffs transported the vessel with the understanding that they would receive certain monies retained by the Commissioners, but the latter refused to pay a total of £2,000 on account of claims for damages through delay.

The judge held that the plaintiffs had been prevented from securing the money on account of the defendants' acts, hence the judgment for the former.

MASSACHUSETTS SUSPENDS NEW PASSENGER TARIFFS TO MARCH 1ST

Boston, Mass., February 10.—Another striking example of the difficulties which railroads experience in getting anywhere under control of political boards has been furnished this week by the Massachusetts Public Service Commission's suspension for a second time of the proposed passenger-fare increase on the Boston & Maine, New Haven and Boston & Albany.

The tariff in question, designed to make passenger fares of the roads more consistent with the 2 1/2-cent basis of mileage rates established late in 1914, was filed in November to take effect January 1. After making no move for almost a month, the Massachusetts commission, just before the tariffs were to become effective, suspended them till February 1. Hearings were held in the first part of January, but, instead of any prompt decision, the commission has again dragged the matter out by a further suspension to March 1.

The Interstate Commerce Commission and every state commission except the Massachusetts one approved the 2 1/2 cent basis fixed by the suspended tariffs and allowed it to become operative on January 1 so far as their jurisdiction was concerned. Although at the Massachusetts commission's hearing no voice was raised against the proposed tariffs of the Boston & Albany, only a few protests were lodged against the New Haven rates, and the bulk of the Boston & Maine criticism was of a single feature of that road's proposal under which its fares would be made to end in even five cents, the commission chooses to hold up all the changes.

The lack of decision by the Massachusetts commission has resulted in many discrepancies. If a person wants a ticket from Boston and Albany, an interstate journey, a ticket is sold him based on a price of 2 1/2 cents per mile, whereas if he is travelling just this side of the New York line (an intrastate journey) a different rate is applicable. Again, if he goes to Nashua, N.H. the ticket is on a 2 1/2-cent-per-mile basis, whereas to a station just this side of the New Hampshire line a different rate is applicable.

GREAT NORTHERN IN DECEMBER.

The Great Northern reports for December and six months, compared as follows:

December:	1914.	1913.	Decrease.
Mileage	8,077	7,792	x 285
Freight revenue ..	\$ 3,092,105	\$ 3,392,924	\$ 300,819
Passenger revenue	956,837	1,223,315	266,478
Total oper. rev. ..	\$ 4,048,942	\$ 4,616,239	\$ 567,297
Maint. of way	435,491	745,858	310,367
Maint. of equip.	601,789	912,798	311,009
Transp. expenses ..	1,444,398	1,781,440	337,042
Total oper. exp. ..	\$ 2,729,601	\$ 3,710,264	\$ 980,663
Taxes	331,347	319,658	x 11,689
Operating income ..	\$ 1,538,669	\$ 1,648,036	\$ 109,367

Six months:—

Freight revenue ..	\$28,910,199	\$33,315,973	\$4,405,774
Passenger revenue	7,704,226	8,903,701	1,199,475
Total oper. rev. ..	\$40,280,076	\$45,910,682	\$5,630,606
Maint. of way	3,774,675	6,232,022	2,457,347
Maint. of equip.	3,761,071	5,347,123	1,586,052
Transp. expenses ..	9,864,613	11,595,806	1,731,193
Total oper. exp. ..	\$19,049,478	\$24,915,429	\$5,865,951
Taxes	3,341,770	3,369,832	28,062
Operat. Income ..	\$18,887,321	\$18,665,361	\$221,960

x—Increase.

CANADIAN RAILWAYS WILL ASK FOR INCREASED FREIGHT RATES.

Ottawa, Ont., February 10.—W. M. Kirkpatrick, assistant general freight traffic manager of the Canadian Pacific Railway, has notified the Railway Commission that Canadian railways are preparing to apply to the Board for permission to make a general increase in freight rates east of Port Arthur. A level advance of 5 per cent, will likely be asked for.

STEAMSHIPS.

CUNARD LINE

CANADIAN SERVICE

Sailings from Halifax to Liverpool:— After

TRANSYLVANIA (15,000 tons) ... March 1st, 1 a.m.

Alaunia (12,400 tons) ... March 12th, after 1 a.m.

Orduina (15,500 tons) ... March 22nd, after 1 a.m.

For information apply to THE ROBERT REPORD CO., LIMITED, General Agents, 20 Hospital Street, Steerage Branch, 23 St. Sacramento St., Uplown Agency, 539 St. Catherine Street West.

RAILROADS.

CANADIAN PACIFIC

Toronto—Detroit—Chicago Via Belleville, Port Hope and Oshawa. *8.45 a.m. *10.00 p.m.

Toronto (Yonge St.) Via Tweed, Peterboro. *7.25 a.m. *10.50 p.m.

Observation-Compartment and Standard Sleeping on night trains. *Daily ex. Sun.

TICKET OFFICES: 141-143 St. James Street. Phone Main 4125. Windsor Hotel, Place Viger and Windsor St. Station.

GRAND TRUNK RAILWAY SYSTEM

DOUBLE TRACK ALL THE WAY MONTREAL—NEW YORK (Via D. & H.) *9.01 a.m. *8.10 p.m.

MONTREAL—BOSTON—NEW YORK (Via C.V.) *8.31 a.m. *8.30 p.m.

Pullman Electric Lighted Sleeping Cars on night trains. Parlor and Dining or Cafe Cars on day trains. *Daily.

CITY TICKET OFFICES: 132 St. James St., cor. Front St. Phone Main 4125. Windsor Hotel. Bonaventure Station. *Main 4125.

REPORT SHOWS GAIN OF \$14,148,000

Annual Report Shows Gain of \$14,148,000. Total Income \$32,165,904 and Total Assets \$753,976,717.

Boston, February 10.—The