

EDITORIAL COMMENT

Economy of Smaller Towers

ON numerous installations of centralized traffic control, the machine has been located in an existing office or interlocking tower alongside or at the end of an interlocking machine, thereby making it unnecessary to enlarge the existing building or provide another structure. Similar installations of centralized traffic control machines at interlocking plants on the Canadian Pacific, the Big Four, the Boston & Maine, the Rock Island and other roads reveal the fact that where such control systems are used the size of the machine is not the governing factor in determining the size of the tower building. The machine itself occupies a very small part of the floor space of the operating room, the required dimensions of which are dependent upon the area required for chairs, desks and other facilities not a part of the signal or interlocking system.

In planning the new interlocking at Trois Rivières, Que., on the Canadian Pacific, as described in the November, 1930, issue, the use of the centralized control type of machine, placed in an existing crossing-gate tower, eliminated the expense of constructing a new tower and thereby reduced the first cost of the installation to such an extent that the construction of the plant was authorized, whereas a larger expenditure would not have been considered justifiable. Thus, it may be seen that the use of a centralized-type control machine may, by reducing tower costs, be a factor worth considering when estimating for new plants or for the consolidation of existing ones.

Why Not Eliminate Train Stops at Permissive Wayside Signals

WHERE local grade conditions permit, intermediate permissive signals are usually so located that a tonnage train, if stopped at the signal, can again be started without difficulty. Where signals are located on long ascending grades on which trains cannot be started without delay and damage to equipment, numerous roads are using so-called grade signals, consisting of a disk attached to the signal mast, which gives the engineman of a tonnage train authority to eliminate the stop at such a signal if it is displaying its most restrictive indication, and to proceed through the block at slow speed, expecting to find the block occupied or a switch open. The same type of special signal is used on some roads where tracks run through towns with numerous grade crossings of streets, the desired result in this case being to keep the trains moving so as not to block the streets any longer than absolutely necessary.

If these train stops can be eliminated safely at some permissive automatic signals, why not at all such locations, especially for heavy tonnage trains? This result has in effect been accomplished on those sections of the Atchison, Topeka & Santa Fe, the Illinois Central and the Chicago & North Western, where automatic train control, with cab signals, is in service without the use of permissive wayside automatic signals. The Rock Island has gone a step further in that the wayside automatic signals have been retained, but the requirement for the train

stop has been eliminated on automatic train-control territory.

On three of the train control installations mentioned, the speed is automatically limited in an occupied block, and, likewise, where grade signals are employed, the speed is naturally limited by grade conditions. However, it is conceivable that the speed when entering and proceeding in an occupied block can be limited by rule. In fact, this is exactly the requirement in effect on almost all roads, the only difference being that the stop must first be made at the signal.

In conferences of signal and operating officers on one large road, serious consideration has been given to the matter of changing the rules to permit all trains to proceed at low speed past a permissive signal. Quite recently, the signal officer of another road was requested by his general manager to secure complete information on both sides of the argument. With the idea that progressive thought of today will welcome an open discussion of the subject, a question is being published on page 98 of this issue, and those who have given the matter study are invited to send discussions for publication in the next issue.

Fight for Your Job

IN a statement to its employees, the management of the Nashville, Chattanooga & St. Louis railway directs attention to the fact that "five years ago this road had 9,684 employees; now it has 6,807. Five years ago it operated 76 passenger trains daily; now 32. It once hauled 4,500,000 revenue passengers a year; now less than one-third of that number. The movement of package freight by railroad is but half what it was five years ago, the number of agency stations has decreased from 239 to 151; more than 40 miles of track have been torn up and abandoned; applications are pending for authority to abandon 11 miles more and every possible economy is being practiced to save other portions of the line."

J. T. Gillick, operating vice-president of the Chicago, Milwaukee, St. Paul & Pacific railway has addressed the employees of that road in a similar vein, calling attention to the decrease of more than \$27,000,000 in the gross earnings of that carrier in 1930, as compared with the preceding year and to the further striking fact that the gross earnings were \$2,400,000 less than in 1920. Mr. Gillick points out that until the causes that are contributing to this condition are corrected, the railways have no alternative other than to continue to curtail their maintenance and other expenses and to reduce the number of employees and the amount of materials purchased.

The Cause

The present railway situation—for the Nashville, Chattanooga & St. Louis and the Chicago, Milwaukee, St. Paul & Pacific are no worse off than the average railway in this respect—is largely the result of new and intensified competition from other transportation agencies, outstanding among which are the motor coach and the motor truck. These agencies are using the highways as a "place of business" without paying adequate compensation therefor, are not taxed on a basis comparable with the railways and are not required to maintain

standards of service equal to those of the railways.

Despite the efforts that are being made in certain quarters to convey impressions to the contrary, the railways have no quarrel with the private automobile owner. They do not ignore the fact that the automobile has introduced a new era in our transportation development. Neither do they deny that the public has a right to select the form of transportation which it prefers. The highways are built and maintained by the tax-paying public and the railways recognize that, for all practical purposes, the 24,000,000 owners of private automobiles constitute the tax-paying public.

The railroad's contention is directed against the motor coach and the motor truck which use the highways, built and maintained at public expense, for the conduct of business for private gain without paying proper rental therefor. They claim the right to demand that they receive fair and equal treatment at the hands of the public with those with whom they are forced to compete in the transportation for pay of persons and property on the highways.

Where is Competition Unfair?

Wherein is the present competition unfair? It is unfair in a number of respects. In the first place, the buses and trucks are not paying their fair charges for the use of the highways. "Bus Facts," an official publication of the National Automobile Chamber of Commerce, is authority for the statement that the bus lines paid 7.23 per cent of their gross revenues for taxes in 1928. In the same year the railways paid 6.37 per cent of their gross revenues for taxes. If we assume that the latter figure is a fair tax to be levied by the government upon the property of operators of motor buses and railways, it leaves only 0.86 per cent of the gross revenues of the bus lines for rental of the highways. The utter inadequacy of this figure is shown by the fact that the railways spend about 14 per cent of their gross income for the maintenance of the "highways" used in the conduct of their transportation operations.

Taxation is Inadequate

Considered from another angle, buses and trucks are now taxed in two ways—through license fees and a tax on the gasoline which they consume. Statistics issued by the National Automobile Chamber of Commerce give the average license fee for a three-ton truck as \$298.22. These statistics also show that there are 29 states in which the license fees are less than this figure, and that in these states the fees average only \$118.26. In the remaining 19 states, on the other hand, the average fee is \$537.07, while the maximum is \$937.50 in Iowa. If the fee charged in the latter state, or even the average fee for the 19 highest states, is not excessive, and the motor transportation interests have not shown that it is, it is self-evident that motor coaches and trucks are being subsidized heavily in the other 29 states, where the fees run down to as low as \$18 in Missouri. Obviously, this subsidy comes from the public which is providing and maintaining the highways that are used by these motor vehicles.

The results are equally discriminatory against the public with reference to gasoline taxes. On the basis of the gasoline consumption per ton mile (a unit that recognizes both weight of machine and distance traveled), it can be shown that the tax paid by a heavy motor coach or truck is only one-third of that paid by a Ford passenger car, in spite of the fact that the heavy vehicle is

admittedly far more destructive to the highways than the lighter car.

Duplication of Service

From still another angle the present motor transportation competition is unfair. In the Transportation Act of 1920, provision was inserted prohibiting a railway from constructing a line without permission from the Interstate Commerce Commission. Under this provision the commission has consistently refused to permit one road to build a line parallel to another on the ground that such action would constitute an economic waste. In effect the inauguration of motor coach or motor truck service on a parallel highway is the same as if another railway had been built. If the one is economically unsound, then the other is equally so.

In brief, the highways are built from public funds for the use of all persons in the conduct of their own business. The motor carrier for hire, however, uses the highway not as an incident in the ordinary pursuit of business or pleasure, but as in itself a "place of business" for a profit-making venture in public transportation. As such, it should be required to pay not only the usual taxes which are paid by all operators of motor cars, but in addition a reasonable compensation for such use of the highways as a place for doing business. It should also be brought under the same regulation as a common carrier as the railways with which it has set out to compete, in regard to character and regularity of service, stability of rates, responsibility for claims, conditions of employment, etc., that has been declared to be in the interest of the public with regard to the railways. Only when such provisions have been enacted will competition be fair.

What can railway employees, and particularly those of the signal departments, do to remove the inequality to which the railways are subjected? They can do many things.

In the first place, they are a very measurable force in influencing public opinion. This is especially true of signal department employees, they are to be found in every city, village, and hamlet. Furthermore, many of them are leaders in their communities, and their influence is correspondingly great. With their jobs at stake, signal department employees, in common with those in other branches of railway service, owe it to themselves and their families to acquaint themselves fully with the unfair competition which jeopardizes their own employment. With these facts in mind they can do much to inform those with whom they come in contact regarding the situation and to encourage those who are in a position to direct the routing of freight or of passengers to send it over the railways. As citizens they also have the right of the ballot to select as their representatives in local, state and national law-making bodies those men who will most properly represent them and their interests.

The problems confronting the railways today are no longer solely those of the management. They are just as much of each individual employee. To the extent to which other and newer agencies of transportation can serve the public better or more economically, public interest will be promoted by using those agencies, and no railway or railway employee can long take issue therewith. To the extent, however, that traffic is being diverted to these agencies on bases other than those of equality of opportunity and regulation, the railways and their employees have just cause for complaint. They owe it to themselves to insist that the past inequalities be eliminated.

It is time to fight.