

for mistakes of energetic promoters? Taking a horse-sense view of the statistics and the comparisons of earnings by mileage in the railway commission report and statistics, the U. S. capital in railroads is 10 3/4 times greater than ours, or 11 times, if you deduct the \$256,000,000 of borrowed money of the C. P. R. and considered as capital by the Government Statistics. Their population is about 14 times greater, their earnings 11 1/4 times greater, their operating expenses 11 1/4 times greater, their railway miles only 6 times greater, with fully 7,000 miles of ours under construction, and not completed or fitted for traffic, and not now being used in earnings. We must, therefore, for honest guidance and comparison, make the calculations on 30,000 miles of rail, which is all that should be taken into calculation in making our comparisons. The other 7,000 miles should be considered as capital, being invested and not yet entitled to be classed as revenue earning. Taking this, and we believe it to be the honest business view, what would our present statistics show re our railway earnings? On page XIV Government Statistics, it shows the average earnings per train mile from 1875 to 1916 increased from .988 to 2.686, an increase of 2 3/4 times. On page 28 it shows the percentage of operating expenses on earnings decreased from 81.1 to 68.9—12 per cent. Here they may claim the one represents only the freight earnings, while the other represents the total operating expenses. Yet, we say it does truly represent the facts. In 1875 the earnings were \$19,470,539, in 1916 \$263,527,157, an increase of 13 1/2 times. The operating expenses in 1875 were \$15,075,532, in 1916 \$180,542,259, or an increase of 11 9/10 times. So you will see by all these comparisons the increases from revenue have been favorable to the railway companies' interests.

Up to war conditions rates of interest on money had been decreasing. The returns of the present year are

more favorable than ever. Everything going their way, how can any increase in rates be justified?

One more fact, table 11, pages 108 and 944, show the revenue train mileage of the Canadian Northern 16,340,999. This mileage earned \$35,476,275—\$2.11 1/2 per mile. Their operating expenses were \$25,244,186, cost \$1.55 to run per mile per train, net earnings \$10,232,088, or 62 cents net per mile for the earning train mile. The average miles run to miles of road was 171. Total mileage made was 16,340,999 over 9,648 miles of road. The C. P. R. revenue train mileage was 45,623,585. The earnings \$124,654,570, earnings per train mile \$2.73. Their operating expenses \$78,237,827, costing \$1.71 per train mile, net earnings \$1.02 per mile, \$46,416,743. The average earning train mile was 353 3/4 to mile of road. Total mileage made 45,623,585, total road mileage 12,900.

What the Canadian Northern and our Government roads require is more trains per mile and greater tonnage. Increasing rates won't help them, and it will add to the burden of all producers and consumers.

Now take the Railways Investigating Commission, summing. On page LXXIV, the amount required to take care of these growing corporations is some \$70,000,000 or \$12,902,333 per year. Why add 15 per cent. to all rates and take \$40,000,000 from the public to pay this \$12,902,333?

I need not refer to the G. T. R. They say, "Relieve us of the G. T. P. obligations and we will take care of ourselves." Let them do so. Take over the G. T. P. and C. N. R., or aid the C. N. R. by loans which they will be able to repay and take care of themselves later on. By this policy the country will save \$40,000,000 per year on transportation rates.

Note these facts: the conservation of the C. P. R.

millions as referred to earlier, together with their remarkable success, was never anticipated by the most sanguine of its promoters. To-day the necessity and opportunity of Canada is great. She must meet the obligations made to aid her development and for war of some \$500,000,000 per year. This must come from our natural and agricultural production, and principally from our great West, and it should travel over our own lines of railway. Then watch these youngsters grow. But remember, cheap transportation makes production possible, and exportation in volume makes dividends for transportation companies. Let all work for volume, not to increase rates that make it unprofitable to produce volume. By the statistics the natural production tonnage, including agricultural production, for 1916 was 85,420,683 tons as against 24,283,404 of manufacturers and miscellaneous in the total tonnage of 109,659,087, and in the manufacturing tonnage 882,829 tons were agricultural implements. From 1907 to 1917 the natural production tonnage increased 2 1/4 times, the manufacturing tonnage only 1 1/2, and the rates ultimately are all paid by the greater tonnage of natural production. We should certainly protect our national natural producing interests from rates or taxes of any kind that would have a tendency to stop their development.

What the railways want is increased tonnage, better distribution of haulage. This increased production and tonnage will come from the West. The C. N. R. and Government roads will be the greatest benefactors. Canada must have increased production to increase exports, to meet her war and other obligations. Increasing rates will not help but retard the bringing of this about, and it will add \$40,000,000 to our producers' and consumers' burdens, \$30,000,000 of which would go into a full feed box. Don't allow it! It is not good business!

## Automobiles, Farm Machinery and Farm Motors.

### Lesson From the Show.

The biggest annual event in motordom, the New York Automobile Show, is over. It proved the most inspiring mechanical event of a decade. Perhaps the greatest feature was the effect the war has had upon the industry in general. American and Canadian manufacturers have always possessed an elastic temperament. They proved this more than ever by quickly adapting themselves to the new conditions. The present day tendency is towards economical operation in all lines of trade. The building of automobiles is the third largest enterprise on the North American continent and so it was only natural that this great commercial undertaking should respond readily to the demands of a world at war. Automobiles are to-day a great system of transportation. They are saving millions of tons of coal. From the cars shown at the exhibition it can be easily seen that the auto engineers in general have been studying every contrivance calculated to save gasoline and oil. They have even gone so far in some cases as to perfect a condenser, which operates in connection with the radiator. Everyone knows that alcohol has proven itself the best anti-freeze mixture, but alcohol evaporates and so in order to save it a condenser has been attached to the radiators of some cars. When the alcohol heats it passes over this condenser and is restored to the radiator without loss. Another interesting mechanical economy is being effected by what is known as a progressive exhaust

heated manifold. It consists of three separate but connecting jackets by means of which three different degrees of heat are developed at three different points. The first jacket heats the gasoline where it is distributed to the cylinders; the second takes care of the heating around the throttle chamber and the third installed at the low speed throat of the carburetor. In the summer time when carburetion is not a difficult problem the heat can be turned off through the medium of a butterfly valve. This device will make for easier operation, greater saving of fuel and less trouble in winter driving.

Inventors have also perfected devices for the rapid heating of the manifold by means of electricity. There are also a number of different gasoline sprays being installed in order that starting in zero weather may be facilitated. One could not help but be impressed with the variety of primers that have recently come upon the market. Nearly all of them are beyond the experimental stage and should prove extremely useful. Attention has also been given to carburetors which can utilize heavier grades of fuel. Such mechanisms are of a saving nature because the heavier the fuel the lighter the price.

The bodies of the new automobiles are more compact and tidier than ever before. It was thought that the 1917 models had reached the maximum of streamline beauty, but we now find that the manufacturers have been able to go several steps farther in developing a

body free from encumbrances. You will notice this year that freak machines have practically disappeared from current production. A number of medium-priced cars are using divided front seats and also utilizing the steering column for starting and lighting switches as well as for spark and throttle levers. A rather striking general feature is the increase in the average wheel base from 113 1/4 inches to 120 3/4 inches. A great many power plants have been enlarged and the average piston displacement is now 269 cubic inches where last year it was only 222.

The tops of the cars include in almost every instance curtains that open with the doors. This feature contributes greatly to the general comfort of motoring. Some years ago the lights in the back of the tops were uniformly oval, but a great many different models are being used this year. Some of the smartest designs include bevelled plate glass windows set in nickel frames. The addition of these as well as other small openings are based upon the fact that while the passengers can see through them with comfort it is difficult for outsiders to look through them into the tonneau.

The New York Show was a great success and settled all details regarding the many fears of the automobile business. The industry has volunteered to take on all the war orders that the allied governments desire it to handle. This inevitably means a smaller production of machines for 1918 but the quality of the models will not deteriorate, the only reduction being in numbers.

AUTO.

## Canada's Young Farmers and Future Leaders.

### Food For Thought.

Give every man a square deal.

"Every failure teaches a man something if he will only learn."—Dickens.

Those who think will govern those who toil.

"I'll do it to-morrow" is responsible for many failures in life; "I'll do it to-day" may be spelled with even letters—"Success".

Half an hour's planning at the start of the day's work makes it two hours better for you.

It is not what a person says so much as how it is said that oftentimes cuts deep and causes heartache.

Don't stand waiting for something to turn up. "Providence helps those who help themselves."

Mistakes are largely the result of ignorance. Young men and women should avail themselves of every opportunity to improve their education. It doesn't cost anything to carry it with you once you have secured it and a good education is a great asset to anyone.

### The Back to the Lander.

EDITOR "THE FARMER'S ADVOCATE":

This article is written for the express benefit of those who are seriously contemplating a farm-ward movement; a movement that should be given every encouragement. That wild and bitter cry of "Back to the

Land," is not a thing to be lightly noticed, nor must it be regarded as a mere symptom of a high-cost-of-living disease that will disappear when that specialist, the food controller, gets his machine started. I think it is a very genuine cry resulting from a species of farm fever, which may be innocently contracted from gazing too long at some pictorial illustration of a peaceful farm scene. This kind of fever is somewhat peculiar in that the sufferers seek relief by eagerly devouring all kinds of farm literature which, as a rule, sends the temperature still higher; a somewhat lamentable fact when a judicious and timely dose of appropriate and helpful hints from the vast experience of a farm specialist would go a long way towards cooling the blood, and inducing a more equable frame of mind. As, however, there doesn't appear to be anyone ready and willing to administer such helpful hints I will, with some temerity I'll admit, undertake the business myself. Probably it will prove a thankless job, but, if there be but one who lives to bless my name, then, I am rewarded.

In the first place then, Sir Would-be-farmer you must have a farm to farm on. That is understood I hope. This being so, and assuming that you wish to buy the land, and that you have arrived at the proper stage of impatience and splutter, so eager are you to be at it, your obvious course is to buy a newspaper and run your optics down the "Farms-for-sale" columns until they become fixed and glaring on something like this:

"For Sale—Grasshopper farm, a dandy fifty acres, never been rented; situated within ten miles of the bouyant town of Hope, and within sight of the town of Despair. Soil is a choice sandy gravel, just the thing for the growing of enormous crops of sweet clover; well

watered, especially in early spring. Good accommodating house that allows all the winds of heaven to pass through, which is an inestimable boon in summer, and a joy forever in winter. The little stars, too, know they are welcome, and they often shyly peep through the places where shingles used to be. There is also a haven of rest for weary sparrows, the barn, which, despite the ravages of time, will stand indefinitely, if nothing be allowed to rub against it. Fences are in first-class repair as present owner, like his father before him, has been repairing them for years, and years, and years; said owner retiring on account of permanent bankruptcy. Snap. Five hundred dollars."

Snap? Well I should say so. Goggle eyed you will read it once, twice, thrice. Your feelings are almost sure to get the better of you, and you will gasp for breath—"Great Scott on tin wheels, was there ever such an opportunity." You will call to your wife, Matilda! Matilda-a-a! Matilda-a-a-a! and when she arrives wild-eyed and breathless, you will proudly point to your discovery, and then lean against the piano, lap one foot over the other, stick your chest out, fold your arms and try to look as much as you can like the picture of Napoleon on the Bellerophon while you pensively whistle a bar or two of "When the Roll is called up Yonder." Your calm exterior will give no indication of the fiery emotions under which you are laboring as you wait in seeming patience until Matilda in hysterical delight respects your dignified pose by throwing her arms round your brawny neck and hailing you as a true deliverer. You will then celebrate the event by setting your ancient gramophone to work scratching out a few rounds of "See the Conquering Hero Comes."

The preliminaries over, your next best move is to hunt for some foolscap—What'll you do with foolscap?