

STATE MUST APPROVE ROAD BONDING ISSUE

Good Highways Vtally Necessary in Montana If Commercial Resources Are to Be Developed to Fullest Extent.

"Montana will never have good highways until the people of this state authorize and vote favorably upon road bonding issues," says W. H. George, chairman of the good roads committee of the Great Falls Commercial club. Mr. George has just returned from a visit of several months in California and speaks enthusiastically of the splendid highways they have in the Golden Gate state. "And they are constructing them all the time, miles and miles of them," stated Mr. George. "And the coming of the automobile has done much to foster this movement here, and some day it will have the same effect here."

Speaking of the \$15,000,000 bonding issue which it is understood will be presented to the taxpayers of Montana this coming fall, Mr. George says they ought to approve this measure, as it will eventually mean much for the state, especially commercially. The motor truck express lines cannot be established on routes of any length and keep up regular schedules unless the state has perfect highways.

California Tests.

Mr. George knows something about California road conditions other than that they are smooth and firm. He says they have saved hundreds of thousands of dollars in freight rates already. Recently tests were made by the roads bureau of the California State Automobile association. These tests were made on all types of roads within the state to ascertain the pulling power required to haul a given load.

The tests disclosed the cold facts that it takes 218 pounds of power to pull a one-ton load on an earth road; 64.2 pounds of power on a macadam road and from 78.2 to 81.3 on gravel highways in good condition. It was further proven that on level earth roads with dust about one inch deep, it requires from 92 to 99.3 pounds of pulling power to get one ton over the road. On the other hand, the same load required only 27.6 pounds of pulling power on a concrete road. The figures are absolutely accurate. The tests were made under the direction of Prof. J. B. Davidson of the agricultural department of the University of California. They emphasize the fact that when a road requires anywhere from 64 to 218 pounds of pulling power to get a one-ton truck load over it, that road is costing the community too much.

Need Federal System.

In supporting Mr. George's remarks, Secretary R. S. Skinner of the Yellowstone-Bee Line association is convinced a system of federal highway construction is about due. He states: "A national system of highways is absolutely necessary if we are to develop our commercial resources to the utmost. Time was when the township road building and repairing system was adequate. The country system was a step in the progress of road construction. Then in some states came the state highways, and now several states, such as Pennsylvania, Michigan and Illinois, have appropriated \$50,000,000 for highway purposes."

Continuing, Mr. Skinner pointed out that these states have awakened to the opportunities good highways will bring them. However, the money appropriated by the individual states will be spent in the states providing the money, which is only natural, as no state will want to appropriate money to better highway conditions for its neighbors. Because there are several large states where the population is sparsely settled, but nevertheless states where highways must be built to connect more thickly settled communities, federal aid must sooner or later be invoked, because it would hardly be fair for the people in Montana, for instance, to appropriate hundreds of thousands of dollars to construct highways for the benefit of the Dakotas and Washington, with Montana as a connecting link.

Of course, Montana would benefit greatly from these highways also, but nevertheless Washington would be, perhaps, the state most benefitted as far as national commerce is concerned. Taxpayers in the various states could be made to pay their part of the expense incurred in constructing highways. But with a national system it would assure good trunk lines throughout the country and make the roads in one state practically as passable and good as those in the next. It would mean the states with slim pocketbooks would benefit from the good roads as well as those with the thickly settled populations and the money to pay.

Those who are staunchest in support of the national system suggest that a highway commission be placed at the head of affairs. This commission would be vested with full power to authorize work, direct the building of highways and disburse the funds placed at the system's disposal.

Truck Replaces Horse.

One of the good things the war and good roads has brought about is the establishment of the motor truck express lines in various parts of the country. These are already helping the farmers to cut freight costs, hasten his deliveries and save his time. They are eliminating food waste, because formerly the farmer had no way to get all of his produce to market, much of it being perishable and destroyed before he could get around to shipping it. Now he places it into his truck and rides to market in a few hours and returns with his purchases in the city.

Secretary Redfield recently said that you may build the railroad up until it is 10 blocks wide and fill the rivers with steamers, and still the farmers' transportation problem is not solved so the motor truck traveling inland, over hills and through valleys, wiping out the isolation that has always existed, becomes the source of our food supply.

The government favors the organization of rural motor express lines, and every dealer should do his utmost to encourage such organization. Many dealers throughout the country are operating truck lines themselves and they find it a paying business, as well as gaining the satisfaction that they procure from serving the public need.

What has been done in Colorado along this line may be cited as a noteworthy example. Colorado in 1917 had 325,000 horses. The war and the advent of the motor truck probably reduced this number. Take as a conservative estimate 200,000 horses used on farms or in transportation, which, replaced by motor trucks, would mean the use of 1,000,000 needed to support the animals, for raising food.

Facing a desperate situation, the governor of Colorado recently set aside one day as transportation day. This has resulted in the formation of hundreds of lines throughout the state. Farmers in this country will have in use 300,000 trucks by the end of this year and, according to estimates, will retire 1,200,000 horses. Every horse displaced means five acres of land that can be devoted to raising food for human beings.

Results at Spokane.

An example which will perhaps interest Great Falls people more than any other is that at Spokane, where the Highways Motors Transportation company, incorporated, is operating an auto truck express line. It was organized by the leading business men of the community and is capitalized for \$100,000. It is using 16 large trucks and operating nine different routes. The company has all the business it can handle, being 68,000 tons, minimum, per year, by the different routes. All trucks are five-ton capacity for long-distance hauling, while smaller ones will be used as feeders.

Trailers are regular features of the express trucking business now. Where operators find their business increasing they can use these profitably, even two or more being used per truck.

Here is what good roads have made possible in several other communities in the United States: De Witt Clinton Main, a farmer at Guilford, N. Y., is hauling 1,022,000 quarts of milk annually into the city of Albany, using two trucks. He also carries 30,500 passengers, or an average of 100 per day. Eleven years ago he was a small farmer.

At Detroit a six-ton refrigerator truck, hauling a heavy trailer, makes daily trips to Toledo. Two and one-half days are required to ship by roadway, whereas the motor truck completes the trip in six hours, hauling 18,000 pounds of beef to the load. The service is now being expanded to other cities.

On the line between Cleveland and Akron, Ohio, in a period of 12 miles, motor trucks hauling freight released 31,200 freight cars for long hauls.

At Indianapolis, 574 motor trucks, loaded with livestock, passed into the union stockyards in one day. They came in a steady stream from midnight until long after the break of day. At Omaha, Neb., the following livestock was delivered by motor truck to market: From Jan. 1 to Nov. 1, 1918, 18,498 head of cattle, 153,019 hogs and 37,130 sheep.

So with these facts staring taxpayers, farmers and business men in the face, it is almost impossible to see where good roads are not of immense and practically necessary benefit to every community, large or small, in the United States. As good roads increase, the motor truck express lines will multiply and freight rates will be reduced, while service will be greatly improved.

STUDEBAKER SHIPS NEW AUTOMOBILES

"Although the great Studebaker factories at South Bend and Detroit were practically on a 100 per cent basis at the time of Germany's capitulation, shipment of new Studebaker cars are now being made to dealers from regular production," says a statement from H. A. Biggs, general sales manager of the Studebaker corporation.

"As soon as the reports of the cessation of hostilities had been officially verified, the resources of the Studebaker plants were thrown into the problem of post-war production, with the result that in less than 60 days new Studebaker cars were being placed in the hands of our dealers throughout the country.

"This rapid and almost magical transition had been made quietly but with startling thoroughness. It is typical, I believe of the resourcefulness of the industry as a whole. It offers another striking illustration of the firm foundation on which the automobile business rests, its permanence and stability, and the engineering genius back of the car itself. Factories in any other line faced with similar perplexing problems of reconstruction, would find it difficult to perform this quick readjustment in less than six months or full year.

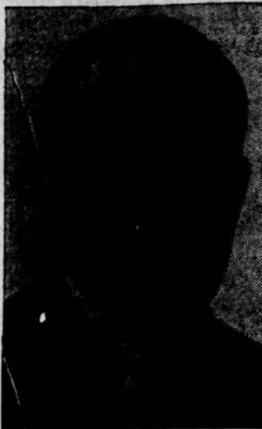
"On Dec. 1, 1918, Studebaker factories were practically 100 per cent war work. And, in accordance with the ruling of the war board, preparations were complete for the entire suspension of automobile production for commercial needs the first of the year. The signing of the armistice, however, brought about a suspension of all passenger car restrictions and abrupt cancellation of most government contracts.

"The suddenness of the war's termination did not stampede America's third largest industry. Just as it was one of the first great industries to adjust itself to war-time conditions and become effective as a war agency, it is now one of the first to get back to the peace-time basis. And with about a million cars behind in production, no fears for the future of this young giant of the industrial world need be entertained.

"The complete reversion of a manufacturing institution so tremendous as Studebaker's is not the work of a day. The conversion period will be a short one, however, as already evidenced by Studebaker's ability to make quantity shipments of new cars to dealers at the present time.

"As an example of the ability of the Studebaker factories to turn out new cars in rapidly increasing numbers, I might mention that the huge forge shop at South Bend, construction on which was begun during the war, is now turning out this kind of drop-forgings for the new Studebaker cars. This new shop, intended as a unit of Studebaker's big steel factory, is but one of the several units that make up our new South Bend automobile plant. Some of the buildings are completed and machinery installed, and the others are rapidly nearing completion.

To Manage Branch



C. R. McCaslin.

Mr. McCaslin has been appointed manager of the new Firestone Tire and Rubber company branch distributing business which is to be established in Great Falls to serve the territory of Montana, Wyoming and Idaho. He is an experienced rubber salesman and has been with the Firestone organization several years. Mr. McCaslin will move his family to this city.

HOW TO SHIFT GEARS

With most cars, particularly those equipped with a plate clutch, one may shift from first directly into high in starting with a normal load on smooth pavements. The inexperienced driver should not attempt it, but the veteran will find he can easily gain enough speed in first to make the shift directly into high without difficulty. Do not attempt it in heavy going or with a heavy load.

TIGHTENING BOLTS

When a car will not hold the road even at moderate speed and requires constant juggling of the steering wheel to keep it traveling in a straight line, it is generally due to looseness in the steering gear. To remedy this, the front wheels should be jacked up and tested.

"GET 'EM QUICK," TAYLOR'S ADVICE

Strain Bros. Anticipating Early Rush for Tires Because of Economy.

"Buy your tires early," is the advice of Walter Taylor, manager of the hardware department for Strain Brothers. Mr. Taylor also has charge of the tire department at this big store which handles the Diamond line, both cords and fabrics. The Diamond tire is one of the best known automobile tires on the market today and has been for years, having been one of the first tires to have been nationally advertised.

Strain Brothers carry a big stock of these popular auto shoes, thousands of dollars worth being kept in their tire department on the top floor.

Mr. Taylor says stocks of tires which the dealers had on hand when the new tax on tires went into effect are not to be taxed and for this reason they will perhaps be sold in the majority of instances minus this tax. Auto owners are certain to take advantage of this fact and Mr. Taylor expects to see present accumulated stock sold in short order.

Another reason he gives is that tire manufacture was curtailed during the war, the government needs being supplied first and the government having control of the rubber supply. For this reason none of the large tire companies have an accumulated stock on hand and the fact that there is a demand for cars that is unprecedented in the history of the industry means there will be a great demand for tires and they will be all new tires as soon as the stock dealers have on hand now are disposed of.

Strain Brothers are distributors for Diamond tires in Cascade, Chouteau and Teton, and parts of Lewis and Clark counties.

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for loose bearings by taking hold of the upper and lower spokes and shaking. If there is perceptible play the adjusting cones should be tightened. The steering knuckle, spindle bearings and drag link connections may be tested for play in a similar manner. Then the steering gear itself should be tested by turning the wheel slowly and watching the drop arm. If the wheel moves an appreciable distance before the arm is affected, there is play in the lower end of the gear which must be taken up by the adjustments provided. There should be just a trifle of play in the steering wheel to prevent stiffness.

TO THIN RUBBER CEMENT

Rubber cement becomes thick and "tacky" after it has been exposed to the air, even for a few minutes. Many car owners use gasoline to thin the cement, but the ordinary grades of gas are unsuitable for this purpose, because there is oil in them. Bisulphate of carbon or high-test gasoline is about the only thing suitable for thinning the cement.

YOU WILL FIND OUR DISPLAY ADVERTISEMENT ON PAGE EIGHT, FIRST SECTION OF THIS PAPER. READ IT. SOMETHING INTERESTING FOR EVERY SHOW VISITOR. Northwestern Storage Battery Co.

DE PALMA FEATS LAUD GOODYEARS

His Tires Had Perfect Score During Recent Events at Daytona.

The recent remarkable speed performance of Ralph De Palma, the automobile racing ace, in which, driving a special Packard car equipped with Goodyear straight-side cord tires, on the beach at Daytona, Fla., he set up an entire new table of speed records of from one to twenty miles, brings forcibly to the mind of the motorist the wonderful development in the pneumatic automobile tire.

The Goodyear tires, with which De Palma's special car was shod, according to Mr. E. R. Preston of the Goodyear Tire and Rubber company, who was present when these records were made, had a perfect score in all the official runs, totaling in excess of 500 miles, at a speed varying from 140 to 150 miles an hour. At the end of the record-breaking performance the tires showed absolutely no wear, and they will be used again by De Palma in other races. As

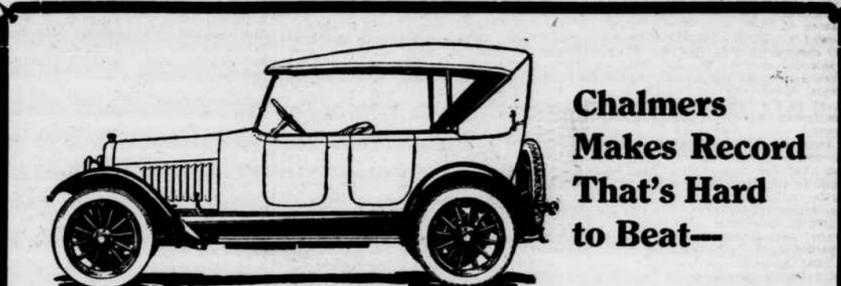
a matter of fact, the Goodyear tire is so wonderfully developed that the racers get attached to the tires that win races for them and carefully preserve them for future runs.

Following in De Palma's lead, practically all the leading racing drivers are now using the straight-side or "no-hook" type of tire instead of the clincher tire, as they have become convinced that the Goodyear claim for this tire and its absolute safety is well founded, as shown by the results at the races during the last few years.

"Cliff" Durant, son of F. C. Durant, president of the General Motors company, and an intrepid driver, who will be at the big tracks the coming year, is one of the latest acquisitions to the ranks of the straight-side users, and he has announced that the coming year he will race on Goodyear cord straight-side tires.

De Palma's performances have been a great victory for the Goodyear cord tires, and the fact that they withstood the terrific strains of his record-breaking speed without showing a particle of wear and are still good for many more races, is an absolute proof of their stability.

It is all bold to say that a wealthy girl isn't married for love. Her coin makes her all the more lovable, doesn't it?



Chalmers Makes Record That's Hard to Beat—

Below is a list of names who purchased late 1917 and 1918 models. Around One Hundred names tributary to Great Falls, and they haven't broken a single part or spent a dollar for parts, except springs. Look over the following list of names and ask those you know about it.

- | | | | | | |
|----------------|----------------|----------------|-----------------|-----------------|----------------|
| E. G. Fagen | D. F. Mains | J. R. Sartain | M. E. Fuller | J. Drinkwine | C. A. Robison |
| E. E. Leach | H. H. Stanley | F. E. Kennan | Jack Zuckor | A. J. Patterson | A. J. Striff |
| Jack Wilson | Obe Harris | E. D. Ross | D. S. Bailor | Charles Davis | Jas. Buxton |
| Wm. Roekamp | M. Jordon | Joe Miller | Henry Lehn | Dell Sykes | John Ramsey |
| O. U. Miracle | Henry Jacobson | A. B. Sykes | Oly Larson | C. Anderson | K. R. Smith |
| J. Swanson | Wm. Leifheit | E. D. Hunter | J. T. Levesque | J. E. Largent | W. E. House |
| A. J. Broneman | Clyde Wilcox | A. J. McDonald | H. Schrader | Frank Laird | Joe Turner |
| B. E. Leslie | Wm. Watterman | W. E. Smith | A. L. Klein | E. J. Sartain | H. J. Wells |
| L. E. Phillips | Manly & Vaughn | Ed Jenson | M. Paltter | Ios. Zanchich | W. W. Miller |
| Tom Knowels | C. T. Koping | Tom Cramer | J. H. Patterson | J. Vanderbos | George Mathews |

Also Forty-Six of these models were sold to dealers in this territory of which I haven't the purchasers' names, and to which I haven't had any call for parts. One of these famous models will be shown at the Auto Show all next week. Call and see the famous

-HOT SPOT MOTORS-

J. A. CRANE

FACTORY DISTRIBUTOR FOR CHALMERS CARS

109 First Avenue South Great Falls, Montana



World's Masterpiece

ANNOUNCING THE LAMBERT TRUBLPRUF TIRE, we wish you to associate it with its reputation for greatest value, and that the manufacturing knowledge of its maker have reduced defects and grief to a minimum.

Its service is most invariably longer than its guarantee of 5000 miles—

By this we do not refer to one or two instances of exceptional usage, but that every LAMBERT TIRE has unusual mileage consistently.

For there lies the basic reason of the unlimited success entertained—the ability of the LAMBERT TIRE to stand up and deliver the unusual mileage in excess of other tires.

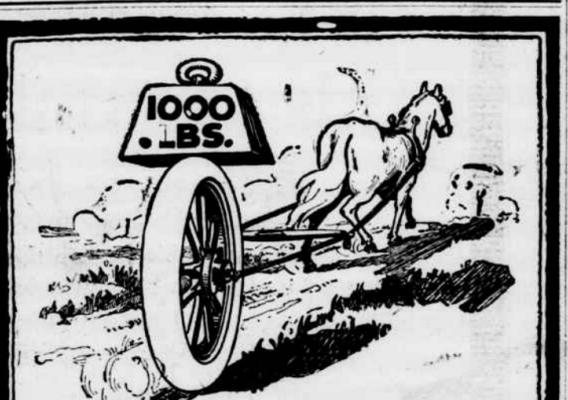
The American Public will not only be told of the Lambert Tire, but also its being absolutely free from the vexatious troubles peculiar to air compression in pneumatic tires.

Why buy trouble when you can avoid it at a Profit?

Distributors who can measure up to our standards are awarded the exclusive selling right.

Montana Trubl Pruf Tire Co.

11 Second Street North



Put about 1000 pounds weight on a tire—

Then hitch a horse to it and drag it over rough roads—

What for?

Exactly! Perhaps you constantly are doing the equivalent?

Sudden, hard application of brakes, that locks the wheels so that your car's momentum drags the tires over the road, is equivalent.

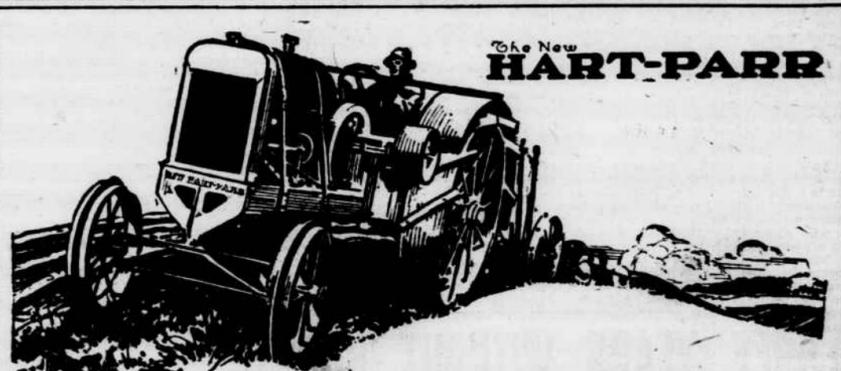
This grinds the treads needlessly, and rapidly destroys the tire.

Control your car more by the throttle and not by needless brake abuse.

Our free booklet "Care Saves Wear" shows you many other ways to save tire money.

Overland-Great Falls Co.

(Incorporated) 301 First Ave. N. Phone 9787



Wins in field of 22 tractors

At the first big demonstration of 1919, held at Columbus, Ohio, under the direction of the Ohio State University, the New Hart-Parr was officially credited with producing 37 1/2 horse-power—5 horse-power more than any other three-plow tractor in the field. In the fuel-economy test, the New Hart-Parr had but one close competitor.

Make and Size	Kind of Fuel	Revolutions Per Minute	Price	Horse-P. Developed	Fuel Cost per H. P. Hour
HART-PARR 30	Kerosene	750	\$1395.00	37.5	.0150
Avery 12-25	"	450	1270.00	15.3	.0178
" 12-18	Withdrawn	"	"	"	"
Aultman-Taylor 15-30	Kerosene	900	2300.00	33.4	.0221
Case 10-18	"	1050	1200.00	19.8	.0173
" 10-12	"	900	1600.00	27.7	.0166
Cleveland 12-20	Gasoline	1400	1585.00	19.2	.0392
Eglin 12-25	Kerosene	950	1385.00	19.2	.0159
Emerson 12-30	"	900	1455.00	24.7	.0219
Frick 12-25	"	900	1850.00	24.5	.0163
Fordson 11-22	"	1090	895.00	21.4	.0177
Huber 12-25	"	1000	1385.00	28.3	.0196
I H C 15-30	"	575	2000.00	35.0	.0216
Moline 9-18	Gasoline	1650	1576.00	28.7	.0373
Pa. Heron 12-25	"	1000	1600.00	24.4	.0343
Rumley 12-20	"	560	1700.00	23.5	.0194
Russell 20-40	"	825	3090.00	31.6	.0254
Shelby 9-18	Gasoline	1100	1350.00	18.6	.0405
Steel Mule 12-20	Kerosene	900	1575.00	21.4	.0183
Titan 10-20	"	800	1250.00	24.1	.0150
Waterloo Boy 12-25	"	750	1350.00	21.2	.0188
Wallace Cub 15-25	Gasoline	850	1600.00	31.8	.0286

(Above data copied from Farm Implement News of Feb. 6, 1919)

See the New Hart-Parr at the Tractor Show March 18-21

What it shows

- Average cost per developed horse-power of other 20 tractors completing test \$65.33 per H. P.
- Cost per developed horse-power of the New Hart-Parr 37.20 per H. P.
- Average fuel cost of all others completing test .0233 per H. P. Hour
- Fuel cost of the New Hart-Parr .0150 per H. P. Hour
- Average developed H. P. of all other 3-plow tractors 24.3 H. P.
- Developed horse-power of the New Hart-Parr 37.5 H. P.
- Average reserve power developed by other 3-plow tractors on maximum load test 0.54 H. P.
- Reserve Power developed by New Hart-Parr maximum load test 7.50 H. P.

Write us today for fully descriptive literature and for the name of the distributor in your territory

HART-PARR COMPANY, Great Falls, Montana.
Home Office: Hart-Parr Company, 868 Lawler Street, Charles City, Iowa

Specifications

Power—Pulls three plows, 30 H.P. on belt, tested at the National Plowing Demonstration at Sarsen, Kansas, developed over 31 H.P. at 750 R.P.M.

Motor—2-cylinder twin, 4-cyl. Valve in head, 750 R.P.M.

Tractor Frame—Cast steel, one-piece. No bend, no twist.

Carburetor—New Drey Kero. carburetor.

Bearings—S. K. F. and Hyatt.

Speeds—Two forward; one reverse.

Transmission—Selective sliding gear.

Cooling Device—Honeycomb radiator shaft-driven pump and fan.

Lubrication—Fresh oil, force fed.

Weight—6150 lbs. 2 1/2 ton.

Price—\$1395 f.o.b. factory.