

TRACTORS SAVE MONEY FOR STREET DEPARTMENT

The Eleventh of a Series of Articles on Motor Truck Cost and Performance, Written for Business Men by an Expert.

By GEORGE W. GRUPP. (Copyright, 1918, George W. Grupp. All rights reserved.)

It is remarkable to notice how motor vehicles have been taking fast hold on municipal officials during the last three years. The citizens of municipalities are continually complaining about the high rate of taxation. High rate of taxation freed the ambition of our forefathers to shake English authority from the Thirteen Colonies. This hatred for high taxes and especially when due to extravagant methods of conducting the Government seems to be one of our national characteristics. The citizenry refuse to bury their hatchet of contempt for tax methods and extravagant habits of officials and high taxes.

Even the most hardened politician is conscious that his political scalp may be demanded if improvements in methods are not made to suit the demands of the people. One way to reduce taxes some officials have come to see is—motor equipment. As a result, in most cities of any importance motor equipment has replaced the centuries-old beast of burden—the horse.



department after department. The latest and one of the most interesting installations has been the purchase of tractors for street flushing and refuse collection purposes. During the summer they are used for flushing purposes and during the winter months the flushing trailer and apparatus are removed and the tractors are used in refuse collection and snow plough work.

Cost of operating each tractor per month averages for flushing purposes, about \$45.75. This sum includes gasoline, oil, driver and helpers' wages, tire repairs, rental, fire, liability, collision and property damage insurance, interest and depreciation. Each tractor, as a flushing machine, has replaced three sweeping machines, one sprinkling wagon, three pickup wagons, fourteen harnesses and horses. More than that, this replacement has meant an average saving of \$2,000 per month, in round figures.

During the winter these tractors did remarkable work as snow ploughs and in the pulling of barrows to break down the hard ice and snow. During the month of December, 1916, three tractors, and that in the face of unusual labor shortage and a strike in the night and garbage department, cleaned the streets of Buffalo of about 100,000 yards of snow. And most interesting of all is the fact that it was accomplished for the sum of 17 cents a yard. This is 8 cents less than any previous record on the snow removal cost rolls of Buffalo.

When the tractors are used for flushing purposes, it is the usual practice of the street department to operate only two flushing nozzles at a time. The front left and rear right nozzles are used for flushing the right side of a street, while the front right and rear left nozzles are used when the left side of the street is flushed. On narrow streets and where only dust is to be removed, three nozzles are brought into action in order that the street may be cleaned in a single operation. This flushing outfit, which will presently be described more fully, is capable of cleaning 150,000 square yards in eight hours; while with the sprinkling feature 300,000 square yards in the same time is not an impossible task.

As a flushing apparatus this outfit has been a big money saver. Street Commissioner William F. Scott says that the portable line hose flushing cost the city of Buffalo \$1.40 per 10,000 square yards, the two man reel method 56 cents per 10,000 square yards, and that the tractor flushing outfit is only costing them 20.5 cents per 10,000 square yards.

The Pierce-Arrow five ton tractor and 2,600 gallon Charles Hvas sprayer-flasher outfit is only costing them 20.5 cents per 10,000 square yards.

The tractor has an eleven foot wheel base. In transmission the gear ratios are the same as in the Pierce-Arrow standard gear box. The rear axle uses 5.75 to 1 worm gear. The rear wheels are 35 inch. With this combination gear reductions and speeds, with motor governed at 500 r. p. m., would be as follows: High, 9.75 to 1 reduction, giving 10.13 m. p. h. Second, 20.65 to 1 reduction, giving 4.72 m. p. h. First, 36.87 to 1 reduction, giving 2.7 m. p. h. Reverse, 47.5 to 1 reduction, giving 2.01 m. p. h.

The tractor may be run in high gear and the pump at low speed, i. e., 448 r. p. m. when sprinkling. Flushing is usually done with the tractor running in second gear while the pump is operated at the motor speed, i. e., 950 r. p. m.

AMERICAN MOTOR TRUCK TRANSPORT

It's an Amazing Thing, Writes Capt. Percival From the Front.

The amazing proportions of the American motor truck transport in France and the remarkable work it is doing are graphically described by Capt. Charles G. Percival in a letter to Walter Woods of the Van Cortlandt Vehicle Corporation, the Peerless distributors here. The Captain also tells about the work of the salvage corps, which practically lets nothing go to waste after it is discarded by friend or foe. The letter follows: "I am at Advance Ordnance Base No. 1—only a few hours from the front. We have wonderful warehouses, shops, railroad system, etc. Thousands of trucks are in constant use.

all sorts of stuff. We expect to send that many over the road every day. "By the time I get through here I will know the make of every firearm in the world and be able to take them all apart and repair them. Our work also includes the salvage and repair of gas masks, grenades, trench daggers, clubs, motors, machine guns, periscopes, airplanes and balloons. It's some department store!

MIDDLE AGED MEN WANTED.

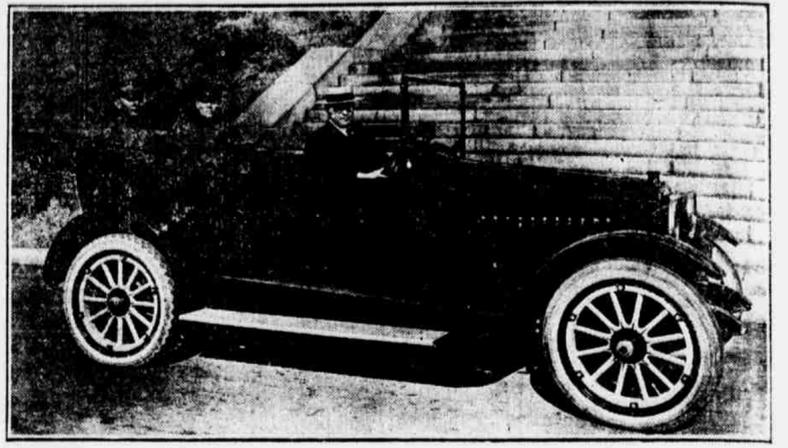
Fine Opportunity for Service Overseas Now. Herbert L. Pratt, vice-president of the Standard Oil Company, who recently returned from close observation of the motor transport service in France, has asked automobile clubs to cooperate to make this service 100 per cent. efficient. He believes that the most efficient men in America today for the work are the middle aged men who are fretting because they have no actual part in the winning of the war. He promises that they will find on the western front a big job. Just how big the job is he intimated yesterday in a letter to members of the various automobile clubs. The letter follows: "To win this war the commanders in chief of the allied armies unite in the statement that the Y. M. C. A. is essential to a military standpoint. Answering Gen. Pershing's call, the Y. M. C. A. is shouldering the responsibility of sending overseas 4,000 men, of whom 500 should be automobile drivers and mechanics.

BIG CONCERN HERE TO HELP MOTORISTS

Putting Important Product on the Market to Restore Car's Finish.

A strong concern is on deck in New York with something very much worth while for automobile owners. It is the Lyknu Polish Company, with headquarters in the Longacre Building and Charles F. Smith in charge. The automobile polish offered by this concern has been snapped up by many jobbers because of its unusual excellence as a cleaning and polishing agent. During the coming week interesting demonstrations of Lyknu will be held on Broadway and on Long Island. Lyknu is a liquid. It is applied with a piece of cheesecloth. With this single cloth and but a single operation, Lyknu cleans, polishes and dries each area of surface in approximately twenty seconds. The automobile editor of The Sun made a test with it and found it just the thing to bring back the old lustre to the car.

Principals in the Great Liberty Drive.



There is nothing like being consistent. When the recent Liberty Loan campaign was under way E. S. Partridge and Fred Titus of the Owen Magnetic Motor Sales Corporation devoted their time and that of their organization for the period of a week to the sale of Liberty bonds. These efforts met with a large measure of success. Now the same company is going to sell Liberty automobiles.

BUREAU OF STREETS.

DE PALMA LEADS IN SEASON'S RACING

Popular Driver Is Regarded as Most Likely Champion of 1918.

That Ralph De Palma bids fair to be the champion automobile race driver of the year is the opinion of speed experts who saw him win the 100 mile Liberty Handicap on the Cincinnati Speedway July 4.

Get ALL You Are Entitled to For Your Tire Money

WITH every tire you buy from us you have: 1 The knowledge that you are securing a good tire. "U. S. Tires are Good Tires."

We sell one make of Tire. 2 The certainty that the price to you and to all purchasers is the same.

We are the only exclusive one-price tire shop in the city. 3 Service that is prompt, intelligent and courteous.

We apply the same dependable service in our guaranteed vulcanizing department.

Track officials who have watched De Palma work out in practice say that his Pace and twin axle has made the two mile circuit at the rate of 120 miles an hour. But De Palma is not relying on speed alone to win his races. Excessive speed is what tears tires to pieces in a very short time. Thus it has been De Palma's problem to set a pace for himself that kept him in touch with the leaders and still saved his tires for the final sprint to victory. He states that when the time comes to cut loose he knows he can rely on the reserve power of his Packard airplane motor. De Palma has a perfect tire record for this season's racing which he attributes in part to the design of his car plus the smooth action of his twin axle engine. His latest victory at Cincinnati indicates that he has a car which matches his ability as a driver and that he has hit upon the right combination of speed and skill to beat the big boys which seems always hovering at his elbow.

CAR PRICES WILL GO HIGHER.

The Wise Man Will Buy Right Away.

"What about future prices for automobiles? Will they cost more after the war?" were two questions put to George Stowe, president of the Mitchell Motor Car Company of New York, upon his return from a visit to the Racine factory last week.

BECAUSE THE HIGHLAND SCOT, WADING THROUGH THE WET HEATHER OF THE MOUNTAINS, FOUND KILTS KEPT DRIER.

In the beginning the Kilt was the garment of the tropics, the trouser of the arctic, for men and women alike. Even before the Roman soldier, himself a Kiltie, occupied the British Isles, Lowland and Highland folk wore Kilts.

When modern life turned the Lowlands to trousers, the wet mountain heather caused the Highlands to cling to Kilts.

But wet heather, had GOODRICH been founded, wouldn't have worried the Highlander.

GOODRICH SAFETY TREAD SERVICE VALUE TIRES. Goodrich would have met his needs with Hipress boots and waterproof garments, just as Goodrich met the critical need of the automobile for the right rubber tire. Twenty-two years Goodrich has shaped the destiny of automobile tires, bringing them from crude, clumsy affairs, to the graceful, masterful GOODRICH SERVICE VALUE TIRES.

THE CITY OF GOODRICH

THE CITY OF GOODRICH AKRON, OHIO. For sale at every Goodrich Branch and Depot. W.S.S. THE CITY OF GOODRICH AKRON, OHIO.

Advertisement for Goodrich tires featuring an illustration of a Highlander in a kilt and a large Goodrich tire. Text includes 'BEST IN THE LONG RUN', 'Why the Scotch Highlanders Wear Kilts', and 'GOODRICH SERVICE VALUE TIRES'.