

**OVERLAND TO KEEP FULL PARTS SUPPLY**

Owners to Be Protected, Regardless of Car Situation.

FRANK RIGGS BRINGS WORD

Western Division Manager Finds Factory at Toledo 75 Per Cent Devoted to War Work.

"No matter what the passenger car situation may be after January 1, owners of Overland cars may depend absolutely on being able at all times to obtain any necessary parts."

So declared Frank C. Riggs, Western district manager for the Willys-Overland Company, who arrived in Portland early last week from Toledo, O., where he spent a couple of weeks on his annual Fall visit to the Overland factory.

"Some time ago, as announced at that time, the Willys-Overland Company increased the parts to be carried constantly in stock at Pacific Coast distributing centers from a three months' to a six months' supply," said Mr. Riggs. "That order will continue to be effective. So at all times there will be on hand in parts depots such as that at the Portland branch a stock of parts sufficient to supply the normal demand for six months to come."

**Stocks to Be Kept Up.**  
"As the supply of any part runs low it will be immediately replenished, with a view to having always in stock enough of the parts for the next six months. Under such a policy Overland owners are absolutely protected."

Mr. Riggs found the big Willys-Overland plant at Toledo busier than ever. This plant at present, explained Mr. Riggs, is on a 75 per cent war work basis and the amount of war work is being increased. It is running night and day.

"The whole automobile industry," said Mr. Riggs, "is being converted into a vast war industry. It will continue to turn out war orders in ever-increasing volume, subordinating all private ends to that of winning the war, so long as the need remains."

"The Willys-Overland Company is still making cars to the extent of about 25 per cent of the normal volume. Naturally, with this lessening volume of new cars, there is fast coming to pass an automobile shortage."

**Moline Plant Visited.**  
"But until the New Year, at least, there will be no difficulty in obtaining Overland cars."

From Portland, where he conferred with H. H. Eling, manager of the local Willys-Overland Pacific branch, Mr. Riggs left later in the week for Seattle and Spokane. From there he will go shortly to San Francisco, which is his headquarters as district manager of the Pacific Coast territory.

While in the East Mr. Riggs took time to make a visit to the huge plant of the Moline Plow Company, the \$19,000,000 corporation which, including the Moline plow and the Moline tractor, has just been purchased by the Willys-Overland Company. The Overland and Moline organizations, however, according to Mr. Riggs, are to be kept separate.

**REX HILL MIGHTY SLIPPERY**  
Horses Have Hard Time Climbing It and Speeding Autos Skid.

One day last week a teamster whose horses could not hold the load he was hauling on the Rex hill, shoveled some dirt onto the paving in order that his horses might get a toe hold, says the Newberg graphic.

A shower that followed soon afterward made the clay dirt an slippery soft soap, which caused a great mix-up of autos and motor trucks that passed that way, though no serious accidents resulted.

It has been evident all along, to observers, that horses would have a hard time climbing the grade there during the winter season, and unless provision is made for teams at one side of the paved grade, there will come times when it will be a "closed highway" for the noble horse. In icy times a coating of sand covering the paving would probably obviate the trouble but rains that would follow would soon take it off.

And while the Rex hill is being discussed, it may not be out of place to admonish the doctors, the nurses, the undertakers and the grave diggers to hold themselves in readiness, for with the speed of the some drivers on the "pike" coming down that long grade and all over the hill in the canyon at the bottom of the hill, it seems hardly possible that the slippery season will be passed over, without some serious casualties being enacted there.

No charge is made for the suggestion and it is not made with the thought that it will cause drivers to be more cautious—it is so easy to turn on the gas, don't you know.

**NO FLYWHEEL ON THIS ENGINE**

Detroit Doctor Invents Automobile Motor on New Plan.

Dr. Robert T. Williams, a Detroit physician, has been granted patents in Washington for an improvement on the automobile engine which eliminates the flywheel. Dr. Williams recently demonstrated to a group of New York engineers that an engine with four or more cylinders will run smoothly without the flywheel.

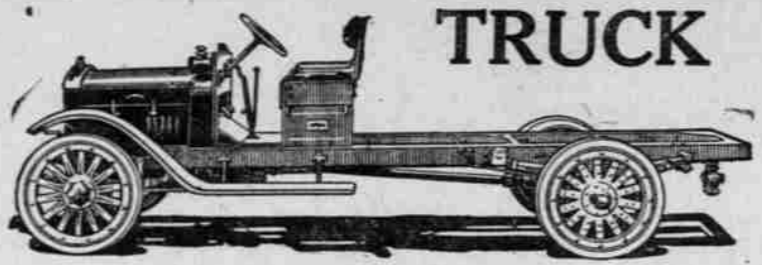
The inventor distributes the usual weight of the flywheel equally among the connecting rods, the balancing weight being placed in the connecting rod collar fitted on the crankshaft. Dr. Williams declares his machine runs more smoothly and with less vibration than if a flywheel is used.

**SHORTAGE IN AUTOS CERTAIN**

Approximately 625,000 Cars Will Be Withdrawn This Year.

Experts on motor car production and consumption estimated that there will be a shortage of at least 125,000 automobiles for 1918. Past records have shown that approximately 625,000 cars will be withdrawn from service this year. This represents roughly the total output of the country in 1914.

**JUMBO TRUCK**



INTERNAL GEAR DRIVE

**2 1/2-Tons Capacity**

Tried and proven units only are used in this truck and the name Jumbo is used because these units are larger than are used by most makers in trucks of 2 1/2-ton rating—some of the more important units used in this truck of 2 1/2 tons rating are used by others in exactly the same size units in trucks rating at 3 1/2 tons.

Jumbo makers believe in a wide margin of safety.

JUMBO 2 1/2-ton Truck, \$2250.00 Factory.

Second-Hand Dept.  
E. First and E. Morrison

**Mitchell**

Noted for Their Easy-Riding Qualities

due to the "Mitchell" Cantilever Spring, with its unique flexible suspension. Notwithstanding we have sold thousands of these Mitchell cars, we have yet to see or hear of the first broken Cantilever Spring. It is spring perfection—and as to the ease of handling this wonderful car, it drives so perfectly and with such ease that it's beyond description. The only way to get an understanding of this feature is to drive the car.

While we have been out of Mitchells for some time, owing to war work by the factory, we now have a very few.

Price of 5-Passenger Car \$1465--Factory



**JORDAN**



A car that is distinctively classy—and of unsurpassed quality—Two models,

SUBURGAN SEVEN—7-Passenger  
SPORT MARINE—4-Passenger

THREE COLORS—

VENETIAN GREEN  
LIBERTY BLUE  
ASCOT MAROON

Broadway at Oak

**AUTOS SOON AT PREMIUM**

SOON EVEN SECOND-HAND CARS WILL BE HARD TO GET.

Automobile History in England and Other Warring Countries Is Only Repeating Itself.

Automobiles of practically every make that are in fair condition will be at a premium in six months from now. This is the opinion of men high in automobile circles here, and is based on several sound reasons.

New automobiles will be almost impossible to get after the first of the year, due to the fact that motor car factories will have curtailed their production in order to take care of war orders.

Very few concerns are now promising deliveries in advance of the next few months, as the future is decidedly uncertain. This very uncertainty, however, together with the fact that few automobiles will be manufactured, makes it certain that people owning motor cars will have a distinct financial asset.

"Used cars will be higher in price than ever before," asserts W. R. DeLay, of the D. C. Warren Motor Car Company, Velle and Peerless car and truck distributors. "In my belief, used automobiles will be at a premium. Anyone buying an automobile is investing his money to good advantage, for all cars will be higher in price before they are lower again."

"At the present time cars are being overhauled by many concerns and sold from floors where formerly only new cars were marketed. This is the natural development of the car shortage, and is directly in line with what was done in London for some time after the war broke out. Factory experts are being secured to do the rebuilding work."

**PROPER WAY TO INSERT TUBE**

Be Careful That Flap Is Absolutely Smooth, Not Creased.

When inserting a tube in either the straight side or quick detachable clincher tires, care must be taken to prevent creasing of the canvas flap. The flap is used to prevent the tube from coming into contact with the rim when the bead spreads. When applying, the tube usually is inserted in the tire and slightly inflated and the flap then put in place. Very often the edge of the flap is creased. It is very essential that the flap be absolutely smooth on both sides.

**1100 CARS IN BANGKOK CITY**

Gasoline in Siam Capital Costs \$6 Per Gallon.

There are about 1100 cars in Bangkok, Siam, of which about 300 are trucks of from one to two tons' capacity. Considering the rather prohibitive price of gasoline there at present—about \$6 per case of 30 gallons—it is rather encouraging that this number is being operated, and still more

encouraging to learn that the authorities do what they can to keep the 60 miles of macadamized roads and streets in excellent condition for the not inconsiderable motor traffic.

**Illinois Auto Increase.**

Secretary of State Louis E. Emmerson, Illinois, reports that \$2,799,562 has been paid for 80,489 Illinois automobile licenses thus far during 1918. This compares with \$1,588,534 for 346,262 cars during the entire 12 months of 1917 and \$1,236,566 for 248,429 cars in 1916.

**Way to Find Loose Bearings.**  
To test a wheel for loose bearings jack it up and take hold of top and bottom spokes, pulling and pushing in opposite directions. If no looseness is shown in this way, try lifting the hub to see if there is play in that direction. If any play is shown the bearings must be taken up.

**If Pump Won't Work.**  
In case your water pump fails on the road do not despair. Keep the radiator filled clear to the top, run on high gear as much as possible, keep spark well advanced, shut off ignition going down hills and change the water occasionally if it shows signs of over-heating.

**In Removing Carbon.**  
If you cannot get at the air valves of the carburetor so as to pour water, etc., through it to remove carbon, have a petcock with priming cup fitted to the inlet manifold. This is also very useful for priming the engine on cold mornings.

**Leather Washers.**  
A leather washer placed underneath the metal washer not only helps to eliminate unnecessary noise, but gives a sort of elastic compression that prevents stripped threads when the bolt is a little too small for its job.

The Signal Corps was the first branch of the United States Army to utilize the automobile in any capacity. This was in 1909.

**HIGHWAY OVER SALT BEDS**

PROGRESS MADE THROUGH GREAT DESERT.

Lincoln Highway Through Utah Rapidly Is Being Pushed to Completion.

"The great dream of those who have long advocated the improvement of the desert section of the Lincoln Highway in the State of Utah is at last coming true. A real road in every sense of the word across the lower arm of the Great Salt Lake Desert is rapidly taking form. The greatest of all Lincoln

Highway improvements will soon be completed."

This is the optimistic statement of H. C. Ostermann, field secretary of the Lincoln Highway Association, who, accompanied by S. A. Host, publicity director of the organization, and A. R. Colwell, of Ely, Nev., engineer, have just made a comprehensive inspection of the Goodyear and Fisher sections.

From Black Point, on the western edge of the desert, the new highway now extends out over the Saline Flat for a distance of eight miles. Grading has been completed upon four miles at the extreme western end. This grade averages three feet and is a full 18 feet in width and is hard and smooth, although no attempt has been made to give it a finished surface.

**Effective Water Control.**  
An effective manual water control may be made by removing the rubber hose between the top of the cylinders

and the radiator and replacing it with a metal one, containing a shut-off valve of the butterfly type, such as are used on carburetors. A rod from this valve is extended through the dash and enables the driver to regulate the

amount of water flowing through the system and hence to control the temperature of the engine.

\*Turn down grease cups in every 100 miles.

**TIRE BARGAINS**

SPECIALY PRICED TO CLEAN UP BROKEN LINES FROM SEASON'S BUSINESS

30x3	33x4
Republic, non-skid ..... \$13.00	Savage, plain tread ..... \$23.75
Congress, non-skid ..... 9.75	Vitalic, non-skid ..... 26.75
Vitalic, non-skid ..... 12.95	Ajax, plain, Q. D. .... 24.50
Vitalic, plain ..... 12.75	Fisk Red Top, non-skid. .... 30.25
Braender, plain ..... 11.50	Fisk, plain tread ..... 24.60
Republic, plain ..... 11.00	Republic, plain tread ..... 23.75
30x3 1/2	34x4
Congress, non-skid ..... 12.75	Congress, non-skid ..... 22.00
Pullman, non-skid ..... 15.75	Savage, plain tread ..... 23.25
Vitalic, non-skid ..... 16.50	Victor Springfield ..... 28.50
Victor Springfield ..... 17.75	Firestone, non-skid ..... 28.50
Superbar, non-skid ..... 14.85	Fisk, plain tread ..... 26.25
Fisk Black Top, non-skid. .... 18.50	Ajax, plain, Q. D. .... 24.50
Firestone, plain ..... 15.75	Congress, non-skid ..... 29.25
Republic, plain ..... 14.75	Victor Springfield ..... 36.50
32x3 1/2	Goodyear, plain ..... 35.45
Goodrich, plain ..... 17.75	Marathon, non-skid, Q. D. .... 35.55
United States, plain ..... 17.75	Pullman, non-skid ..... 28.50
Lee, plain ..... 17.75	36x4 1/2
Congress, non-skid ..... 16.75	Batavia, non-skid ..... 32.00
Firestone, non-skid ..... 19.75	Imperial, non-skid ..... 32.25
Victor Springfield ..... 19.75	Victor Springfield ..... 36.50
Goodyear, N.-S., Q. D. .... 21.00	Lee, plain ..... 35.40
Republic, non-skid ..... 21.00	37x5
Diamond, non-skid ..... 18.75	Imperial, non-skid ..... 36.50
Diamond, non-skid, Q. D. .... 18.75	Congress, non-skid ..... 36.50
32x4	Victor Springfield ..... 48.00
Fisk, non-skid ..... 25.80	38x4 1/2
Firestone, non-skid ..... 26.75	Superbar ..... 31.60
Montford ..... 22.40	Congress, non-skid, Q. D. .... 30.95
Congress, non-skid ..... 22.75	Firestone, non-skid, Q. D. .... 31.25
McGraw, non-skid, Q. D. .... 29.50	McGraw, non-skid, Q. D. .... 29.50

Mail orders promptly filled, goods shipped C. O. D. Give second and third choice and style of rim.  
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Save You 1/3 to 1/2 On Your Tires  
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