

LUBRICATION HOLDS DOWN DEPRECIATION

Lack of Good Oil Makes Your Car Wear Out.

INSPECT THE CAR OFTEN

Engaging Clutch Harshly and Poor Form in Shifting Gears All Are Hard on Parts.

The most essential thing to low depreciation is good lubrication. This applies to every moving part of the car from the steering connections, which move little, to the main bearings and connecting rod bearings, which move very fast. Bear in mind the fundamental principles of lubrication, which are:

1. Lubricate according to the speed of the part and the load on the part.
2. Use the best grades of oil, graphite and grease.
3. Attend to lubrication regularly so the moving parts will not be dry even for a moment.
4. Drain your engine oil every 500-1000 miles. It may seem cheaper to use the old oil now than to buy new in cost, but repairs are more costly than oil. See that the oil gauge always works and that there are no oil leaks about the engine.

Good Lubricant Best Economy.
Use gear oil in the transmission and rear axle, use a stiff lubricant for universal, steering connections, etc., where oil cannot be easily retained. Attention to lubrication regularly will avoid rapid wear of a part. Once a part is badly worn a lot of lubricant helps little. Avoid the wear in the first place by daily and weekly attention to lubrication. Tire depreciation is more rapid in summer than at any other time of the year because the motorist seems to have little time to give the tires the needed attention. The proper inflation pressures should be maintained and inflation checked once each week.

Once each week also examine the tires for tread wear. When the tread is worn, clean out the grooves with a file and then apply another, after which fill the cut with tire tough. Tires ought to receive more than usual attention because of the increased cost this year.

Watch the tread of the front tires to see that they are not being worn unduly because of wheel alignment not being correct. Drive more carefully over rough roads, do not speed on any kind of road, especially a rough one.

Study Instruction Book.
Look over your instruction book and become acquainted with all adjustments for wear. If you allow parts to become too loose they will wear more in proportion to the work they do.

Driving more carefully will do a great deal toward lowering depreciation. For example one can wear out a set of brake linings in a few months by neglecting to have the brakes on long down grades by descending in gear and using the engine as a brake by cutting off the ignition.

Wheel alignment can be disturbed by striking a curb too sharply. Engaging the clutch too harshly can permanently harm a part of the power transmitting system. Allow the clutch to engage easily, stop gradually, apply the brakes intermittently. Save driving means safe and economical driving. Learn to shift gears without clutching. Practice will soon show the exact engine speed needed to make a noiseless shift.

ELEVEN AUTOS MISSING

POLICE LIST UNRECOVERED STOLEN CARS.

Total Includes Four Dodges, Two Fords, Buick, Overland, Maxwell, Tulsa.

Only 11 automobiles are on the stolen car list of the police auto theft department as not having been recovered. The number includes four Dodges, one Buick, one Chevrolet, two Fords, a Maxwell, an Overland and a Tulsa, besides two motorcycles. Persons getting trace of any of the cars here listed are asked by Lieutenant Harvey Thatcher, in charge of the auto theft department, to let him know at once. The list: Buick, 1920 touring, Oregon license 85323, motor No. 618413; Chevrolet, 1918 touring, Oregon license 22126, motor No. 62318; Dodge, 1920 touring, Washington license 117082, motor No. 2004213; Dodge, 1920 touring, Oregon license 87455, motor No. 221138; Dodge, 1918 touring, Oregon license 31478, motor No. 30905; Dodge, 1920 touring, Oregon license 81808, motor No. 2004884; Ford, 1919 roadster, Oregon license 13737, motor No. 3215014; Ford, 1919 touring, Oregon license 20146, motor No. 324706; Maxwell, 1918, license tags missing, motor No. 27784; Overland, 1918 touring, Oregon license 47785, motor No. 31670; Tulsa, 1920 roadster, Oregon dealer's license 709A, motor No. 24856; Cleveland, 1918 motorcycle, Oregon license 235, motor No. 10115; Harley Davidson, 1919 motorcycle, Oregon license H63, motor No. 119A22491. Recoveries since last bulletin—Buick, 1920, license 15578, motor No. 506423; Chandler, 1918, license 82140, motor No. 64570; Dodge, 1918, license 47641, motor No. 140172; Ford, 1914, license 73752, motor No. 17117.

CITY CALLS ROAD BILL MEET

Aberdeen, Wash., Citizens to Study Provisions of Carillon Measure.

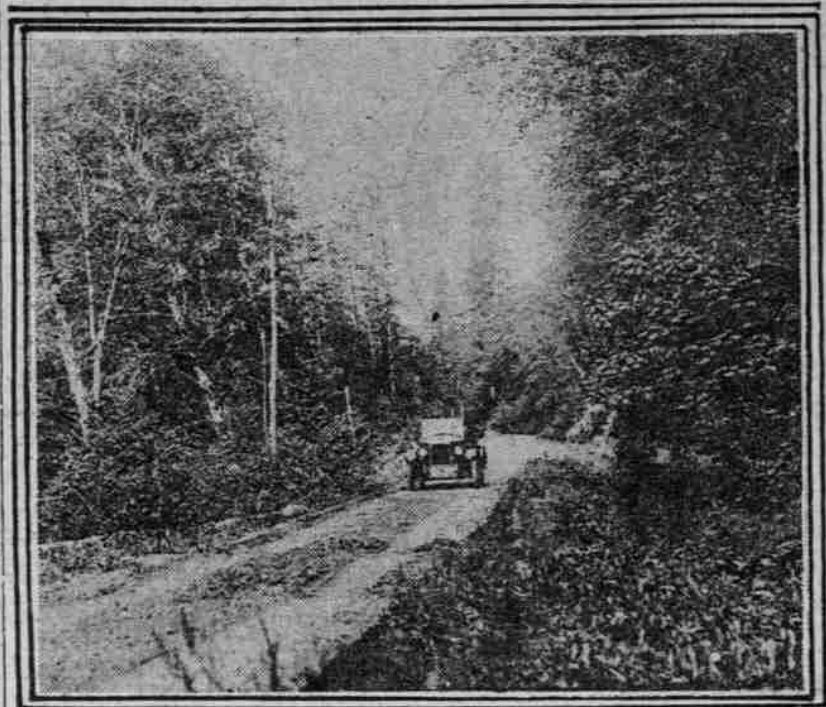
ABERDEEN, Wash., July 31.—(Special.)—Aberdeen citizens will be given an opportunity to discuss the Carillon Road bill at a mass meeting to be held here in the Liberty auditorium early in August, under auspices of the Washington State Good Roads association. Because of the wide interest in the bill a speaker will be provided by the association and following his address the meeting will be thrown open for discussion of the measure.

The meeting will be attended by a strong delegation of Grays Harbor motorists interested in the bill.

Brake Adjustment.

A mistake frequently made especially by new car owners, is to adjust the brakes so tightly that they slide the wheels when applied. Of course this stops the car quickly, but it inflicts such excessive wear on the threads as to make it a very expensive operation.

MANY MILES OF PLANK ROAD LIKE THIS ON INLAND HIGHWAY TO ASTORIA VIA MIST AND JEWEL.



The picture, taken on a recent run to Astoria via Seapoose and Clatskanie, shows the main highway, then by the detour over the hills from Clatskanie to Mist, made necessary by paving on the lower Columbia river highway, and to Astoria via Mist and Jewel, shows the character of 12 miles of plank road on this route. All but 8 mile of the plank is in good condition. Some of it traverses some of the most beautiful timber to be found in Oregon or any other state. The car is a Mitchell six.

TITAN BATTERIES HERE

PORTLAND FIRM NAMED AS OREGON DISTRIBUTOR.

Titan Battery & Electric Company Obtains Agency for Well-Known Auto Replacement Battery.

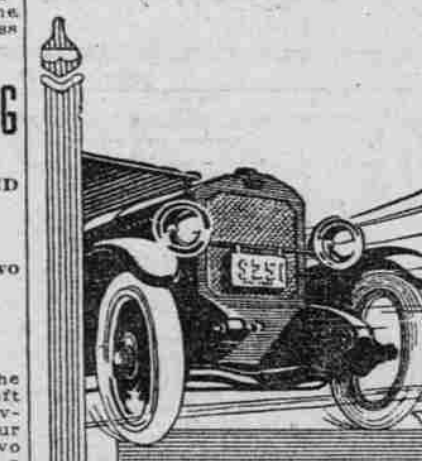
The agency for Titan batteries in Portland and all of Oregon has been taken by L. E. Kurichanoff, who has formed the Titan Battery & Electric company at 411 Davis street, to distribute them in this territory. Arrangements were made through A. M. McMillan, Pacific coast representative for the Western Electric company at Seattle.

The Titan battery is manufactured by the General Lead Battery company, but arrangements were made some time ago whereby their distribution is in the hands of the Western Electric company, which has branches in 50 large cities of the United States. The General Lead Battery company is now greatly enlarging its plant. It also makes farm light batteries.

OVERLOADING HURTS TRUCK

Decreased Ability to Negotiate Roads Causes Excess Wear.

Don't load your truck beyond its normal rated capacity. It was designed and built to carry that load, certainly it may carry more, but this practice invites inevitable loss. To



The SKELTON \$1295 Beautiful Inexpensive

Q Its individual and exclusive design and beautiful harmony of lines, distinguishes the Skelton Car from all others.

Q In addition, because of its simple, but perfect mechanical construction, operation cost is reduced to a minimum.

Q Built in St. Louis—the new automobile center of America—by the Skelton Motors Corporation.

Q Let us demonstrate how inexpensive the Skelton can be operated.

C. A. Gore Motors Co., 625 Alder St.

The SKELTON "The Car you'll be proud of."

BRAKE JAMMING COSTLY

THERMOID MAN TELLS CAUSE OF TIRE WEAR.

Slamming On Brakes Often Results in Making One Tire Wear Out Faster Than Others.

Have you ever wondered why one of your rear tires wear out much faster than the other?

In nine cases out of ten, says Robert E. Allen of the Allen & Hebard company, distributors for Thermoid tires, the reason is that the brakes do not take hold equally hard on both wheels. One is looser than the other, with the result that one of the wheels spins while the other grips the road. Treadire, one sudden application out as if it were held against a grindstone.

If the brakes are adjusted so that both wheels are held the same, neither tire will be subjected to undue strain, and moreover there will be much less danger of the car skidding. The cost of having brakes adjusted properly is trifling in comparison with the amount saved. In applying the brakes, says Mr. Allen, the motorist should always take care to retard the car's motion gradually. Jamming on the brakes suddenly and bringing the car to a sudden halt grinds and burns the tires, causing great damage to the tread. One sudden application of the brakes often causes more damage than 3000 miles of normal usage.

Sometimes it is of course impossible to avoid bringing the car to a sudden stop, but there are many times when every motorist does it needlessly. He runs along at a fast rate of speed and then, just before he wants to slow down, he steps with full force on the brake. By putting on the brake gradually, the car would be slowed down normally and no damage would be done to tires.

CAUSE OF COUNTRY'S GROWTH

Greatest Gains Since Development of Automotive Industry.

From 1879 to 1914, the population of the country gained 100 per cent. During the latter part of this period, the volume of business gained over 300 per cent. While our population was merely doubling itself, the yearly value of manufacturers was multiplying by four and a half. Such facts show how the buying power of business expands much faster than population, thereby, proving that our business market is the fastest growing of all markets.

But, during the years when the volume of business made the rapid increase of 300 per cent, the number of business concerns increased only 67 per cent. The growth of the business market, therefore, is something more than an increasing number of businesses. The greatest growth comes from the expansion that continues in some concerns long after their establishment. The greatest period of growth in that time has been in the

Practice shifting the gears until you know instinctively from the car's speed just when you should make each shift.

last 20 years—in other words it dovetails with the birth, growth and expansion of the automotive industry. In spite of this, there has been a feeling during many stringencies to tighten up on non-essentials. Immediately the automotive industry was selected as an enemy under that category. Not universally, however, are glad to say, but only in some sections. We can account for it only because they do not realize and appreciate the necessity of this great business.

TRACTOR LIKE SIX HORSES

Department of Agriculture Completes Interesting Statistics.

Statistics regarding the use of tractors have been obtained by the bureau of farm management of the department of agriculture from 260 replies to a questionnaire sent to farms in central Illinois. It has been proved that with a 28-inch horse-drawn plow one man accomplishes from 70 to 80 per cent more than with a single bottom plow. One man with a 28-inch plow driven by a motor tractor covers 30 to 35 per cent more ground in a day than does a man using six horses on a horse-drawn plow of the same size. A three-bottom plow, drawn by a suitable tractor, enables one man to accomplish from 40 to 70 per cent more than does the two-bottom plow drawn by six horses.—Motor Life.

AUTOISTS PENETRATE WILDS

Forestry Service Is Building Fine Road to Lost Lake.

HOOD RIVER, Or., July 31.—(Special.)—The forestry service is certainly building a fine road to Lost Lake, said Edward Hawkes, former county commissioner, who returned Tuesday from a motor trip to the end of the road as far as completed. "We were only a mile and a quarter from the lake. The crew told us that our car had penetrated the woods farther than any other to date. The road is on an even grade and smooth. It might be a little wider."

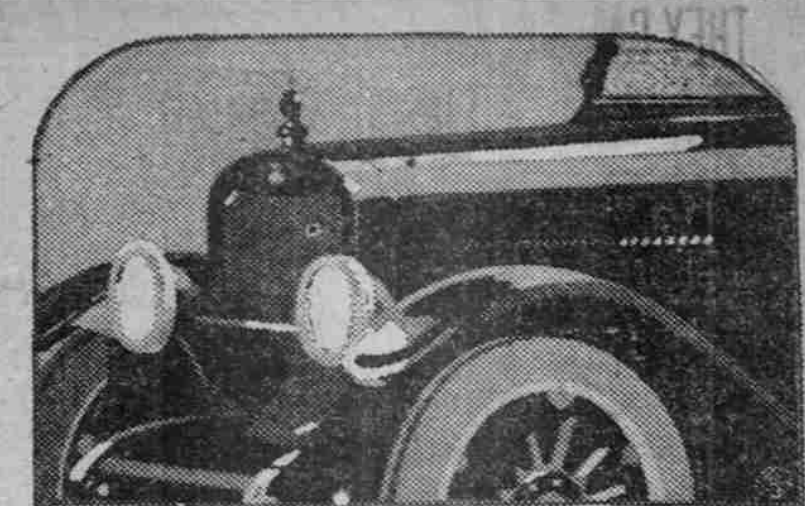
Mr. Hawkes was accompanied on the forest trip by Mr. and Mrs. H. C. Spauld of Missouri, who are visiting the valley and Mr. and Mrs. A. L. Mason.

ROAD WORK IS PRAISED

Contractor Says Tillamook County Equipment Best to Be Had.

HOOD RIVER, Or., July 31.—(Special.)—Tillamook county is given high praise for road work by A. C. Loftis, local contractor, just back from an outing at Rockaway beach. "The county authorities there," says Mr. Loftis, "have as fine equipment as I have ever seen anywhere and as a result their roads are in excellent condition. They draw a combined scraper and grader with a huge caterpillar engine. The roads are kept shaved up in perfect condition."

Burning Out Coil.
When the spark gap of a plug is too great, so that the current cannot jump the gap, there is danger of burning



KING

"The Car of No Regrets"

More KINGS Sold Than Any Other Car in Its Price Class

Why? Because of its superior value, Its wonderful performance, Its remarkable economy, Its free and willing service. It's made good and will continue to do so.

Breaks Yosemite Economy Records for 8-cylinder cars

ON the 358.5-mile grind from Los Angeles to Yosemite a King "8" Touring stock car made 21.9 actual miles on a gallon of gas.

ASK any of the many King "8" owners—they will tell you of the remarkable mileage—1000 miles on a gallon of oil.

THE King "8" is a marvel of economy to operate, as your service costs you nothing. Here's our plan:

52 Weeks of FREE Service

No strings tied to our plan—best by test—only skilled mechanics employed.

No Extras to Buy

The King "8" car is sold complete, including 5 cord oversize tires, spotlight, bumper, motometer, automatic power tire pump, extension trouble lamp, full tire cover, Victoria side curtains, glass wind deflectors, state license and many other extras all included.

Rubin Motor Car Co. Distributors Broadway at Hoyt

Built to Endure UNIVERSAL BODIES

Offering a Complete Service

Intent upon assisting truck owners to the fullest extent, we have combined with our superior product a service that covers every phase and feature of the commercial body-building industry.

Your requirements are considered in detail, together with every influence that may be employed in your advantage, before our shop starts work.

Then a staff of men, who are thorough masters of their trade, put the utmost of human skill into carrying out your desires.

Permit us to communicate with you.

Universal Body Corporation Builders of Commercial Vehicle Bodies 900 Sandy Blvd. Phone 218-97

Built to Endure

Now You Can Cut Your Tire Cost In Half

When your tire has given you all the mileage you can safely demand of it—

When the rubber tread is worn thin but the fabric is still serviceable—

When your next move seems to be the purchase of a new tire; call at nearest Gates Half-Sole Tire Service Station listed below and learn how to get a complete new tire with greater than standard mileage guarantee, at one-half the cost you have been accustomed to paying.

A new scientific principle of tire construction—invented by Chas. C. Gates, E. M.—which incorporates your casing within a new factory built Gates Half-Sole Tire, makes this radical reduction in cost and unusual gain in safety and comfort possible.



A glance at the illustration, which shows the reinforced double fabric strength and double cushion resilience, explains why over 1,000,000 car-owners, including the largest business concerns in the country, regularly and repeatedly purchase Gates Half-Sole Tires.

These exclusive cost reducing—worry ending Gates advantages appeal to every motorist regardless of cost, yet Gates Half-Sole Tires, guaranteed puncture-proof, cost only one-half as much as ordinary tires of corresponding size.

More than 2,000 Gates Half-Sole Tire Service Stations are now serving motorists everywhere. The list below is to help you locate the one nearest to you.

Authorized Service Stations Conducted by Dealers Listed Below:

Wm. C. Wilbourn, 430 Alder Street

Portland—Union Avenue Tire and Battery Shop, 485 Union Avenue, North.

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| <p>OREGON.
Albany—Rialton Electric company, 219 W. 2d street.
Astoria—Ashland Vulcanizing works, M. C. Lininger & Son, Eastern Supply company, 373 East Main street.
Astoria—Highway Tire Service, 311 Duane street.
Baker—A. H. Robinson, care Masters & Perkins, M. E. Milburn Tire company, care R. L. Gorman.
Bend—Best & Harris Vulcanizing company.
Cannon—Hopper & Fattend, C. Hopper and E. R. Fattend.
Corvallis—E. M. Hogue, 108 North 2d street.
Cottage Grove—John C. Currin, Dallas—C. J. Shreve.
Eugene—Jay Moore, 956 Williams street.
Freewater—Virgil G. Goodman, Depot street.
Grants Pass—Charles A. Hansen.
Heppner—Stephen M. Irwin.
Hood River—Heights Garage, 124-1210 C street.
John Day—Electric Shop & Battery Service station.
Junction City—S. M. Price.
Klamath Falls—Charles B.</p> | <p>Johnson, 6th and Klamath Falls avenue.
La Grande—Leighton & Oxnier, corner 1st and Adams streets.
Lakeview—F. L. Keiser.
McMinnville—B Street Garage, 514 South B street.
Medford—R. A. Pettit, Jr., 152 S. Riverside street.
Milton—L. J. McIntyre, Prop. Tire Shop.
Newberg—W. S. Stull, 23 and School streets.
North Bend—Forest & Kleg, Inc.
Oregon City—Smith's Tire Shop, 509 7th street.</p> | <p>Pendleton—Gertson & Marty, 329 Cottonwood street.
Roseburg—Clarence C. Baker, Salem—The Quackenbush Auto Supply company, 219 West Commercial street.
Seaside—Hanson Smith Garage, Williams Brothers' Garage.
The Dalles—Motor Service, 107, 13 E. 2d street.
Woodburn—N. Becker & Son.
WASHINGTON.
Goldendale—Hudson Tire Shop, W. B. Hudson, prop.
Kelso—Kelso Tire Hospital, J. F. Krane, prop.
Vancouver—Hansen Tire Service, 109, B. 6th street.</p> |
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Factory Branch—60 Federal Street, San Francisco, California

Dealers wishing to make inquiry concerning open territory, should address the home office at Denver

GATES HALF SOLE

MANUFACTURED BY THE GATES RUBBER COMPANY, DENVER, COLORADO

Gates Half-Sole Tires

Gates Tested Tubes

Gates Super Tread Tires