EXPERT GIVES RULES FOR TAKING PROPER CARE OF AUTOMOBILE

Many Important Details Must Be Attended to Advisedly if Best Results Obtained.

west Auto company, are to the point,

The first principles that should be acquired in the care of an automobile by the beginner may be classified un-

First-Lubrication: Second-Adjustment; and,

Third-Cleanliness

Lubrication, next after the gasoline which develops the power, is the most important thing in connection with

The moving parts of the motor, and of the car itself, are composed of many different kinds of metal. Whenever two parts of metal move upon each other friction is created and the metal quickly destroys unless a cushion of Light Six Displayed in Window in lubrication is interposed between the

The lubrication of the surfaces of the pistons and cylinders is, of course, of the greatest importance. The character of oil used for this purpose must be carefully looked to. Ordinary oil will not answer inside of the cylinders, because of the tremendous heat which the explosion of the gas develops. The average heat inside of the cylinder is about 1000 Fahrenheit. Subjected to such a heat, a poor quality of cylinder oil becomes gummy, fills the cylinders the 59,000 mile mark is passed. and covers the piston heads with carsatisfactory condition. Next to the motor is the care of the

transmission and the differential. Should either of these become dry, irreparable injury will result. A source of frequent injury to the

transmission gear is caused by some one forgetting to screw the cap in posi-tion in the housing after renewing the Inbrication. If the cap is left off, the gearing will "throw" the grease out of the gear case, run dry in a few days, and then destroy itself. Lubrication, however, must not be

neglected at any point, or injury will Next to the lubrication is adjustment. The tremendous strain to which every part of the automobile is sub-

jected when it is hurled across the country at great speed causes huts to slack, bolts to loosen, rivets to give way and 'play' to affect all parts in a adjustments constantly made, other-

wise injury will result. ment in importance in the care of the age. A heavy black track is left beautomobile is to keep it clean. The method of cleaning also is itself of

overwhelming importance. Dust and dry dirt or earth of any kind should never be scruped or rubbed from any of the polished surfaces of the automobile with a cloth or waste, or anything of a similar character. Even the lightest feather duster used in removing dust from surfaces will injure them. The dust is for the most part composed of very fine particles of fragment is composed chisel edges so hard and sharp that i blown upon glass with an air blast it would cut it away. If rubbed or dusted off the polished portions of the auto-mobile, they will cut the "finish," and

age, and after it is removed, the fin- company, where his duties largely will ished portions may be rubbed with old be in an advisory capacity in the encotton cloths that have had all the gineering department as well as in as-

The WORM DRIVE

An Exclusive Feature of the

Jeffery Chesterfield Six

Once properly mounted, the gear requires no adjustment

(simply oil) as long as the car lasts. The car starts more

easily with the absence of that jerk which annoys the pas-

The worm gear is also a gasoline saver and beautifully supplements the efficiency of the light running six-cylinder

motor by reason of its continuous pull in climbing grades.

Sixty-five per cent of the English cars use the worm gear drive and many of the highest grade French cars, such as

The worm is made from case hardened open hearth steel

The Thomas B. Jeffery Company

Main Office and Works Kenosha, Wisconsin.

FRANK C. RIGGS

Company

Distributors for Oregon and Southern

Washington. 23d and Washington Streets, Portland, Oregon.

sengers and destroys the tread of the tire.

imported from Sheffield, England.

DeDion Bouton.

stiffness crushed out of them by long Mud should be washed off of all pol-

ished surfaces, and never allowed to dry upon a car. The chemical action of the moisture in the process of drying dulls and injures the finish great-The novice in the care of the automobile can readily prove this to his own satisfaction by carefully removing a small dried spatter of mud from any portion of the finished part of his He will find that the place it covred is a dull spot in the finish, and will ever remain so. Unless an automobile is kept clean,

the working parts have a tendency to accumulate grit, which counteracts the effect of lubrication, causing the parts to heat and then injure themselves.

An automobile should be noiseless, or nearly so. The squeak or grind of Note-Every present or prospective metal upon metal is notice to the drivowner of an automobile is deeply in-terested in the care of his car. The following suggestions made by C. M. about an adtomobile, outside of the Menzies, sales manager of the North- gentle murmur of its motor, or the detonation of gas explosions, it is being and should be preserved for reference injured, and the automobilist whose nature abhors unnecessary destruction of machinery will acquire an ear attuned to all the poises given off by the motor and throughout the entire car and if any one of them is out of tune, if he himself is constituted as he should be, he will be in misery until the clamor of the injured part has been silenced by adjustment and lubrica-

Motor Been Running Since December

Eastern City Will Keep Going Until 50,000 Mile Mark Is Reached.

"At an eastern branch of the Haynes ompany the motor of a light six was started on the first day of last Decem er, and has been running night and day until at the present time the speedmeter registers over 20,000 miles. states IL L. Mann, local distributor for Havnes. "It is the intention to keep

rear wheels may revolve and operate he speedometer. The hood is removed | way. and the motor runs without any auxilmary cooling agent. The surrounding emperature is that of the salesroom. No adjustment is permitted at any oint. ntire 50,000 miles without regrinding. and the spark plugs are not to be

"The vacuum system of gasoline feed is employed, so that it is a simple matter to refill the gasoline tank from time to time. The oil consumption is averaging 590 miles to the quart. But ne pint of water is poured in the rad! ator after each 850 miles of travel The gasoline consumption is averaging miles to the gallon

The milcage indicated by the speed neter is marked off on a large map of the United States, so as to give graphic representation of what distance would have been covered had the This should be carefully watched and car been actually traveling on the road A miniature automobile is mounted on the map and moves from city to city Next to the lubrication and adjust. as soon as the motor runs off the milehind. So far the miniature automobil has made one complete circuit around the coast and border line of the United States, and has completed a trip across the continent to the Pacific coast and

New Duties to Be Largely Advisory

in Engineering Department as Well as Assisting in Management.

Detroit, Mich., Feb. 27 .- Sidney D mobile, they will cut the "finish," and Waldon, vice president in charge of if this process is kept up, it will soon forework and current engineering of the Packard Motor Car company, has A jet of water shot against the dust severed his connection with that com-will take it away with the least dam-

> In designing and building a style carriage it is quite

> natural that silence should

be considered a prime

factor. To that end we

have pioneered in the use

of the worm drive rear axle which is being adopted by the builders of the

highest grade electric

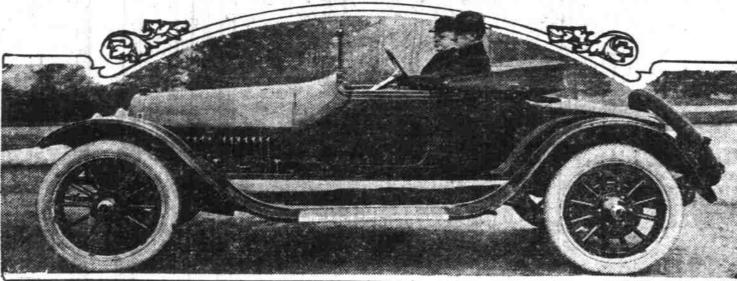
The worm gear is not only

quieter but more powerful than the old bevel gear

now in use in other cars.

pleasure vehicles.

NEW ROADSTER FEATURE AT TACOMA AUTOMOBILE SHOW



First 1915 Buick Six, now being shown in Sound City. A. S. Eldridge (at wheel) and Mel G. Johnson.

Books Every Motorist (Who Can) Should Read:

"The Lure of Old Oily Waste," by Woodworth Tread. "Ridding the Garden of Weed Chains," by Cowl Dash.

"Spring Songs-A Lubricated Symphony," by Satisfied Owner. "The Rise and Fall of a Piston Rod," by Sorry First.

"The Seedless Radiator," by Standard Welding.
"Memories of a Dead Magneto," by Mrs. Pyrene.
"The Vanguard of the Mudguard," by Sedan Coupe.
"The Mystery of the Innertube," by R. I. M. Cut.

"The Perils of Zoline," by Atwater Kent.
"It's the Wrong Way to Tickle the Carburetor," by Bill Bosch.

"The Wrail of the Lonesome Packard," by Henry Joy, "Four Million Loose Nuts," by O. Henry Ford. "The Homesick Lockwasher," by Helpful Hint.

"Little Journeys to the Homes of Great Chauffeurs," by Oldmother Hubbard. "The Ne'er Run Well," by Dirty Muffler.

The Story of a Thousand Punctures," by Ajax Patch. "Round the World on a Gallon of Gas," by Bunk Franklin.

The Love of a Pair of Pliers," by Carrie Cotterpin. "Under Two Hoods," by Barney Cornfield.

"The Call of the Sparton," by Foredoor Roosevelt.

"The Spot of Grease," by John D. Rockefeller.
"The Light That Failed," by Gray Davis.
"Saved," by A. Windshield.
—From the

appointed vice president for engineerstill in Warren, Ohio, Mr. Waldon ad- the California race is the fact that a vanced from almost the bottom of the special purse of \$100 has been set aside ladder to sales manager, general man- for the most unlucky contestant. ager and vice president in turn. He is today one of the big figures in the Mr. Vincent came to the ndustry. Packard company in 1912, having previously been associated with the engieering work of the Hudson Motor

Contest Has Odd Feature.

-From the New York Evening Mail. sisting the management in a general tional motorcycle classic which is to way. Jesse G. Vincent, chief engi-neer of the Packard company, has been mile course at Venice-by-the-Sea. The course is being carefully gone over for ng to succeed Mr. Waldon. Associ- the long grind, and the contest promated with the Packard organization ises to be as big a drawing card as Federation of American Motorcyclists The valves are to be used the practically since its inception, having the annual Dodge City and Savannah in January. joined it in 1902, when the concern was 30-mile events. A unique feature of

NEW ASSISTANT MANAGER

The Oregon Motor Car company through General Manager W. C. Garbe, announced last week the appointment of E. C. Habel as assistant manager of the concern. Mr. Habel has been March 1 is the closing day for en- with the local selling agent of the P. Taft, 2d, was announced as schol-trants in the Venice 300-mile interna- Studebaker line for the past two years, arship leader of the Yale freshman

in charge of their accounting department. In announcing the promotion of Mr. Habel, Mr. Garbe stated that he had every confidence in his ability to handle the business of the concern whenever it would be necessary for him to be in other parts of the territory. Mr. Habel is an eastern boy, his home being in New York city. as been west for five years and has made many friends since coming to Portland, who wish hfm every success in his new position

MOTORCYCLE NOTES

Don Johns carried away the honors n the recent motorcycle events at the Ascot track, at Los Angeles, by covering 16 miles in eight minutes and 14 Ray Creviston won first place in the 100 mile contest, reeling off the century in 94 minutes and 11

Fifteen hundred motorcycles were icensed in Ohio during the month of January.

hundred and twenty-three membership cards were issued by the

"I never touched a tool during the entire trip," says F. Herbert Reddish, of Lund, Idaho, who recently made a 00 mile run on his motorcycle in eight

Wheeling, W. Va., motorcyclists are Ity some time during the summer.

Taft Jr. Leads Yale Class. New Haven, Conn., Feb. 27 .- Charles



amination. His father, ex-President Taft, was second in the class of '78, and his grandfather, Alphonso Taft, later a cabinet officer, led his class 60

School Bather Appointed. painted school bather to a large school from her classes.

in the manufacturing district. Kansas City, Feb. 27 .- An official duties are to see that each child in school bather is a recognized office the school has a bath at least once a now with the Kansas City school sys- a week. The children are not to be tem. Mrs. A. F. Beterie has been ap- allowed to take a summer vacation



The Much Talked of Superiority of the **EIGHT-CYLINDER**

Gets on the Nerves of a Six Dealer

As everybody knows, the wonderful performance of the Cadillac "eight" is the talk of the town as far as automobiles go. It flattens out the hills and flies on the level from two to sixty miles an hour on high without apparent effort.

Enthusiasm caused by its wonderful performance has gotten on the nerves of one of our friends, a "six" dealer, and, not being able. to stand it longer, an advertisement appears in last Sunday's Journal trying to disparage the performance of the eight-cylinder motor.

The charge that the eight-cylinder motor is untried is absolutely without basis. It has been used almost to the exclusion of other types in aviation for many years. Glenn H. Curtiss won the first International Aeroplane Speed Contest at Rheims, France, in 1909, with an aeroplane equipped with an eight-cylinder V-type motor. The same type of motor has been used in France in automobiles for a number of years.

In the Oregonian of February 20th is a reproduction of a photograph of a gas-electric car to be operated by the North Bank Road between Portland and Rainier. The power is supplied by an eightcylinder V-type motor. It does not seem reasonable to suppose that a car manufactured for transportation purposes, which calls for hard and continuous service, would use that type of motor if it were untried.

These controversies are very distasteful to us, but since this one was forced on us, we propose to give the "six" dealer a chance to prove his assertion that the "so-called superiority" is not in the motor. We will take our demonstrating car, which is the low-geared one they are complaining about, and contest with the "six" for speed, hillclimbing, slow running, quick acceleration, gasoline economy or most any other kind of a contest they can name, permitting the "six" dealer to select whatever gear ratio suits him best.

That certainly ought to be a fair proposition, as it is customary in speed or hill-climbing tests to permit each dealer to select the ratio best suited to his car. If our car can defeat the "six" at slow running, hill-climbing, as well as at speed, it clearly proves the superior flexibility of our motor and disproves his assertions.

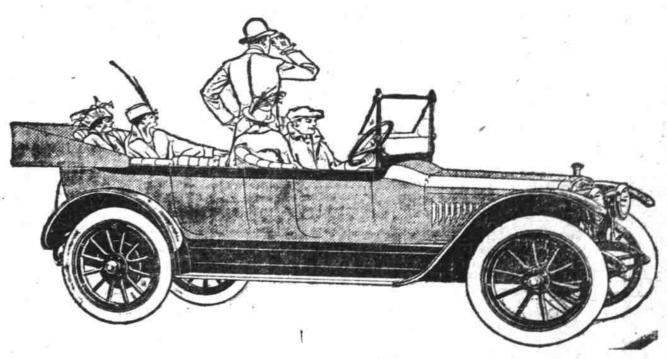
The tendency in motor construction is distinctly toward the highspeed, high-efficiency engine. The Cadillac Company, by embodying that type of motor, has been able to materially reduce the weight of their car, increase its ability in every direction and greatly cut down cost of operation.

Covey Motor CarCo.

21ST AND WASHINGTON STS.

PORTLAND, OREGON

Hopes Realized at Last



How many times have men and women bought cars at medium prices, hoping to get excellence and finding only mediocrity! But now, at last, their hopes come true. What was never possible before is now for the first time an actual realization in the New-Size Winton Six at \$2285. A car without a single apology lurking anywhere in its composition. A car creditable to maker and owner alike-its goodness emphasized by the most appealing beauty. And finished in your own personal colors.

The Winton Motor Car Co. 23d and Washington Sts. Phone Main 4244