

The Automobile Speaks

It tells you what it is, what it requires and it asks to be treated fairly.

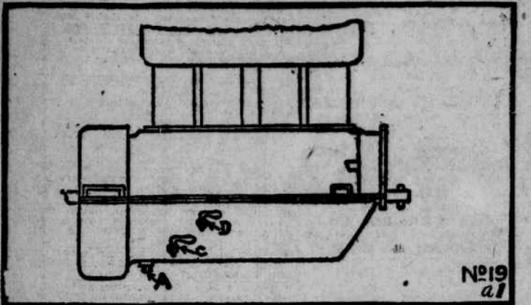
By Frederick C. Guerrlich.

No. 19.

CARE OF THE OILING SYSTEM.

Of course the first care of the oiling system is to see that there is the proper amount of oil in the crank case. Of all the things you must do to take care of your car, here is one of which you dare not be negligent. A burned out bearing will mean that the entire engine must be dismantled, and it is safe to say that this will mean at least a week's work for a good mechanic and some for his helper.

You must keep an eye on your oil gauge and sight glass on the dash, so as to be sure that the pump is working properly. Many a bearing has been burned out because of a failure of the oil pump. As a rule, when the bearings do not get oil, they will first bind, and so put a great load on the engine. When your engine labors on the level, as though it were on a steep grade,



and especially if it gets hot and knocks, look to your oiling system, as this is a sign of lack of lubrication.

I would advise all owners to find out what grade and brand of oil works best with their engine, and then to buy this oil in sealed, labelled cans. The gas engine is a heat engine, and it takes an extremely high grade of oil to lubricate properly where the temperature is as high as it is on this type of engine. A poor grade of oil will decompose or "crack" into its elements, hydrogen and carbon, as soon as it comes in contact with the hot parts. This carbon will be deposited on the piston and cylinder head and on the valves, where it will become white hot and often ignite the gases before the piston has come up on its compression stroke, and so try to drive the piston back in the wrong direction. This will cause what is known as the "carbon knock." The carbon will also get between the piston rings and often cause them to stick.

When the oil, no matter how good, gets past the piston rings and into the combustion chamber in any quantity, it will carbonize, as there is no oil which will stand the heat found here.

Because auto engine oil must be of so high grade, the habit of stopping at the first garage and asking for a quart or pint of light, heavy or medium oil is a bad one. All garage owners are not high principled, and many, especially those catering to the transient tourist trade, will buy only the oil on which there is the most profit. Wherever practical buy in a sealed, labelled can.

As to the proper weight or grade of oil, no rule can be given, as many things enter in to decide this, such as piston clearance, compression space, type of engine and kind of oiling system, speed, etc.

A number of the large oil companies have made tests on different cars, and have gotten out booklets in which they give a table showing the proper grade of oil to use for all cars and models for many years back. Your supply dealer probably can furnish you with one of these. Your instruction book will also tell you what grade of oil to use.

Most engines require a heavier oil in the summer time than in the winter time.

In practically all of the present day cars the oil is used over and over again. In time this oil, even though a little is added now and then, becomes thin and will have lost most of its viscosity and lubricating properties. For this reason the oil should be drained out of the crank case about every 1,000 to 2,000 miles for each gallon the crank case holds is given as a rule), and fresh oil poured in. This is not a hard job, and will often result in the elimination of carbon trouble. It is surely worth while.

When you change the oil, be sure also to clean the oil strainer. Many a bearing has been burned out because of neglect in cleaning the oil strainer at reasonable intervals. When the strainer is clogged, little if any oil can get to the bearings.

To drain off the oil, there is always a "plug" in the bottom of the crank case, about in the position shown at A in the illustration. Generally this is simply a square-headed plug, but sometimes it is a hollow plug requiring a socket wrench for its removal.

Many cars are equipped with a float-gauge, which shows the amount of oil in the crank case at a glance. When a float-gauge is not furnished, two pet cocks, as C and D of the illustration, are screwed into the sides of the crank case. The level of the oil must always be kept between these two pet cocks. Thus, if, when D is open, the oil flows out of it, the level is too high, while, if no oil flows out of C when it is opened, the level is too low, and more oil must immediately be poured in.

SPEED TRAPS IN NEW YORK AND NEW JERSEY

There seems to be quite a revival of the former practice of maintaining speed traps at certain points in New York and New Jersey. Automobile drivers who exercise care and vigilance when out for a trip will avoid annoying delays. Advice has come to the Automobile Club of America of a speed trap in operation north of Hoboken, between that town and Allendale. A motorcycle policeman is very active on this road and special caution should be observed.

MOTURING THROUGH THE BERKSHIRES

Many Short Trips Can Be Made From Williamstown.

One of the most delightful places in the Berkshires to spend the summer months is Williamstown. Good roads radiate in all directions and the geographical situation of the town is ideal for motorists wishing to locate a center from which to make one-day trips through the charming scenic country of western Massachusetts.

There are so many of these short motor trips that start from Williamstown and cover from seventy-five to 100 miles each that the motorist can make a run each day for two weeks without going over the same road twice. The Bureau of Tours of the Automobile Club of America, through O. M. Wells, chief roadman, for this week's tour, provides a description of the run from Williamstown to New York city and supplements this with an outline of a few of the many enjoyable side trips.

All the trunk lines going north to Williamstown from New York are in excellent condition at the present time excepting for a few short stretches that are now in the process of construction. The most direct route is to follow the inside trunk line to the Berkshires by going to Dobbs Ferry, then through Briarcliff, Yorktown Heights, Carmel, Pawling, Amenia, Sharon, Lakeville and Salisbury to Canaan, where the Naugatuck Valley route is joined, then continue north through Sheffield, Great Barrington, Stockbridge, Lenox, Pittsfield and North Adams to Williamstown, 174 miles.

The Naugatuck Valley route is very popular. One along the Shore Road through New Rochelle, Rye, Stamford, Norwalk and Bridgeport to Stratford and then north through Shelton, Derby, Seymour and Naugatuck to Waterbury; the other route, not quite so congested with heavy traffic, runs north to White Plains, then through Armonk, Redford, South Salem, Ridgefield, Danbury, Newtown, Southbury and Middlebury to Waterbury. From Waterbury go north and join the Berkshires trunk line through Thomaston, Torrington and Norfolk to Canaan.

The Albany Post Road can be followed through Poughkeepsie, Hudson and Rensselaer to Troy, where the route turns east to Williamstown; or a cross connection can be made from Poughkeepsie through Millbrook to Amenia and from Hudson through Hillsdale and South Egremont to Great Barrington. From Valatie through Chatham, State line to Stockbridge and Lenox. From Albany through Nassau and West Lebanon over Lebanon Mountain to Pittsfield. From Troy either via Hancock and South Williamstown or through Hoosick and Bennington south to Williamstown.

The Mohawk Trail always makes an attractive and popular motor route. The start is made from Williamstown and Adams and follows east through North Adams and over the trail to Greenfield, which is just thirty-eight miles from Williamstown and an excellent place for a luncheon stop. The return can be made by retracing this road, which gives the view quite a different aspect. A change can be made by running south along the Deerfield River to Deerfield then west through Conway and Ashfield to Litcha. From Litcha go west through Cummington, West Cummington, East Windsor, Windsor and Dalton to Coltsville and there turn north through Berkshire, Berkshire and Adams to North Adams and back to Williamstown.

A pretty trip goes north from Williamstown over Pownall Hill to Bennington, then west through Hoosick, Potter Hill, Boyntonville, Pittsfield, Haynesville and Brunswick to Troy, stopping at Troy for lunch and returning via Congress avenue to Wynantskill, Averill Park, Sand Lake, Alps, Stephentown, Hancock and through South Williamstown to Williamstown.

There is also an interesting run over good roads from Williamstown to Manchester, returning the same way. Every motorist should go through the heart of the Berkshires, providing they are stopping at Williamstown, by running over to North Adams then south to Pittsfield, Lenox and Stockbridge to Great Barrington, returning through Housatonic, Glendale, Interlaken and Lenox to Pittsfield; or the route can be continued straight north from Glendale to

West Stockbridge and Richmond, entering Pittsfield. West Stockbridge and Shelton to Williamstown. From Pittsfield another interesting run would be via Lanesboro, New Ashford and South Williamstown to Williamstown. A delightful afternoon's trip will be found by going through North Adams to Pittsfield, then west over Lebanon Mountain to Lebanon Springs and north through Stephentown and Hancock and back to Williamstown. This route may be extended by going from Lebanon Springs to Brainard Station, then north through a very rugged section known as the "Alps route" through Alps, Sand Lake and Averill Park to Troy, returning through Pittsfield and Boyntonville to North Peterburg, then through North Pownall and Pownall to Williamstown.

BUICK ANNOUNCES NEW MODEL FOUR

Announcement is made to-day of the presentation before the motoring public of Buick's new four cylinder line. There are four models in the line, including roadster and five passenger to four passenger open cars and three passenger coupe and five passenger sedan in the closed models. Inasmuch as it has been known in the automobile trade for some time that Buick purposed adding a line of four, considerable interest attaches to the specifications covering the new models. In motor construction Buick has adopted the valve-in-head principle with which its name has been so prominently connected for twenty years. The cylinder bore is 3 3/4 inches, with stroke of 4 1/2 inches. The motor develops between 35 and 40 brake horsepower and road tests have shown that the power plant will deliver up to 50 miles an hour with ease. Features of motor construction are the large three bearing crankshaft and twelve inch long connecting rods, extra long rods being provided to reduce vibration to a minimum. Automatic carburetor heat control gives automatic lubrication throughout. Another important feature, which is standard equipment on all Buick cars, is the heretofore unheard of feature through which ideal vaporizing conditions are obtained.

The transmission is of the selective sliding gear type, three speeds forward and one reverse. Prices, f. o. b. factories at Flint, Mich., are: Roadster, \$385; touring car, \$375; coupe, \$1,475; sedan, \$1,585. In adding the four cylinder models to the seven models of six cylinder cars now produced, Buick executives feel they have rounded out their line and constructed cars which are in every respect worthy of the Buick name.

KEYSTONE TIRE CO. SHOWS MOVING PICTURE

All day long and well into the night great crowds stand before the windows of the Keystone Tire and Rubber Company, at Broadway and Sixty-second street, intently watching the showing of a new film entitled "The Contented Motorist."

The entire picture is unusually well done and is interesting from beginning to end. The film is both educational and entertaining, and it is the purpose of the Keystone Tire and Rubber Company to have the film shown in theatres, colleges, public schools, etc.

The principal character in the film is a motorist who happens into the headquarters of the Keystone Tire and Rubber Company to buy a Keystone Cord. The customer asks many questions, all of which are answered by the salesman, and, finally wants to know where Keystone tires are made. Here the salesman replies that they are made in a big, modern, fully equipped factory located at Kingsbridge, in the heart of New York city.

JORDAN'S NATIONAL USED CAR POLICY

Too long have motor car manufacturers turned their eyes to the need of raising the standard in used car buying. "This has resulted," says Edward S. Jordan, "in a deplorable lack of confidence on the part of the public in buying used cars. This need for a definite stand regarding the used car situation has led us to announce to the public a used car policy which will be national in its effect and will operate through every Jordan distributor throughout the United States."

"This policy considers the used car buyer in the same light that we do the buyer of a new car. Many who have hitherto hesitated to buy a used car for lack of confidence in the organization selling it can now go to a Jordan distributor and buy a car with that same fine trust which purchasers of Jordan cars know."

"While startling in its broad fundamental understanding of the needs of motor car buying, this policy is but a forerunner of what will be the ultimate attitude of all good manufacturers."

N. A. C. C. AWARDED CERTIFICATE OF MERIT

To the National Automobile Chamber of Commerce has been awarded a certificate of merit by the War Department of the United States in recognition of loyalty, energy and efficiency in the performance of its war work, which materially advanced the war program. The citation by the Director of Purchase, Storage and Traffic at Washington says that the certificate is awarded "for the hearty and efficient cooperation in response to the call of the Government for motor vehicles in the war with Germany. They immediately placed all their resources at the disposition of the army, waived individual commercial advantages, extended their facilities and organization and finally accepted cancellation of their orders cheerfully and at bare cost on the suspension of hostilities."

ATTRACTIVE CHALMERS SPORT MODEL ARRIVES

The new Chalmers sport model, which has just arrived in New York, is attracting considerable attention at the Chalmers salesroom, Broadway and Fifth-ninth street, said Harry J. De Bear, president and general manager of the Maxwell-Chalmers Distributing Corporation. "That this car is without a doubt the most attractive and graceful model the Chalmers company has ever turned out is the consensus of opinion of all those who have seen it. It is painted royal blue with a vermilion running gear and black disc wheels with red striping. The color combination is very striking and appealing. The car is finished with a beautiful luster, which makes it stand out very prominently, and is upholstered in a glass leather."

AUTO PRODUCTION NOW 87 PER CENT.

Activity in Industry Expected to Have Healthy Effect on All Lines.

Production reports from the car and truck factories of the country show that the automobile business in the second quarter of 1921 was 87 per cent. of the corresponding period in 1920, due largely to the fact that one of the chief manufacturers is operating at 126 per cent. of the 1920 basis. The other makers, however, are going on a 57 per cent. basis and are manufacturing at 107 per cent. or more than double the rate of the first quarter this year. Motor truck production is more than one-third better than it was during the first quarter.

This return of activity in the third largest industry is expected to be a marked stimulus to other lines. During the second quarter cotton production was at 83 per cent. employment at 75 per cent. since at 41 per cent. and pig iron at 39 per cent. of the same period a year ago. The effect of the large sales of automobiles is expected to be felt in these commodities during the third quarter.

Automobiles not only consume large quantities of raw materials but also call for production in semi-finished and allied lines such as electric wire, accessories, tires. The industry itself employs over 300,000 men in its factories, with as many again in the accessory plants.

There are 35,000 dealers in the country employing 100,000 salesmen. This army of salesmen has been one of the most potent forces in turning the tide of depression. The "order takers" were quickly eliminated last fall, and the men who remained were experienced and efficient. The good automobile salesman has to be a

high type of man, since he must have some engineering knowledge, and he must see to it that the car gets proper attention after it is sold if he is to secure reorders.

RAY BATTERY COMPANY CONDUCTS BATTERY TEST

Automobile storage batteries are under the scalpel Monday and Tuesday of next week at the Electrical Institute. Their amperes is under exacting scrutiny; their voltage is getting some technical analysis.

All of which is being done at the instance of the Ray Battery Company of Ypsilanti, Mich., the concern which has been setting the pace in the battery business for the past year. It has made heavy sales in a dull year by emphasizing always the ability of its battery, and it has backed its claims with an unconditional two year guarantee. It has proved these claims all over the country in tests such as the present ones. And it has engaged the Electrical Institute with its eminent engineers and superb equipment as a fitting climax to this long series of successful trials.

Automotive engineers are following these tests because of the challenge sent out by the Ray company to all battery makers to set their product beside the Ray for test. There are no restrictions upon the contest. And it is expected that the tests will amass a large fund of technical information as well as definitely indicate the relative merits of batteries now on the market.

NEW FERRY BEGINS OPERATION AUGUST 6

The Queensboro Chamber of Commerce and the College Point Civic Association have worked for several months to secure the resumption of the ferry service between College Point in Queens and Clason Point in The Bronx and are elated over the results of their labors. For the new College Point ferry will begin operations on Saturday, August 6.

continued about three years ago by the Twin City Ferry Company, will be of the greatest benefit not only to College Point but to all other sections of Queens, or still further south, the Queensboro Bridge.

RAY

Ray Challenges the World

On August 1st and 2nd, at the Electrical Testing Laboratories, 80th and East End Avenue, New York, the Ray Battery will go into competition against any other make of storage battery in the world.

All batteries in this test will be handled by the engineers of the laboratory.

Makers of other batteries are invited to set their product beside the Ray for these trials. The only restrictions are that the batteries shall be opened and inspected before the test, and that samples of the production plates shall be submitted with the batteries.

The tests will include duration of discharge, charging at excessive rates, in fact, every nature of test to determine the durability and long life of the various batteries.

Battery men, automotive engineers and the public are cordially invited

Ray Battery Co., Ypsilanti, Mich.

Ray Battery Sales Corporation, 1926 Broadway Eastern Distributor Phone Columbus 6485



New Models—New Prices

Here's the news you have been waiting for. For months past the one query most often propounded in motoring circles has been, "What is Reo going to say—and when?"

Here's the answer. New Closed Models—4-passenger Coupe and 5-passenger Sedan—are now available.

New Prices on Touring and Roadster models effective August 1st. Story is too long to tell here. 'Twould take a page to tell you about one model alone.

Besides you will have to see these new Reos to fully appreciate. Suffice to say, all Passenger Car Models have that wonderfully silent, sweet-running, amazingly powerful Reo Six Motor—the greatest motor in the world of its size and for its purpose.

In every genuine advance in automotive science—in all that makes for greater motoring satisfaction—this Six upholds Reo traditions of leadership and merits the title, "The Incomparable—the Six of Sixty Superiorities."

The epitome of Reo engineering experience—the last word in coach building. In that mighty Reo Speed Wagon we now have something sensational to offer you.

Nobby Cord Tires all 'round and—a greatly reduced price—also effective August 1st.

This Speed Wagon dominates the Field regardless of carrying capacities. Wherever Motor Trucks are known this Speed Wagon is known as the best. It fits every business—meets every carrying need.

Range of usefulness is practically unlimited—most versatile as well as most dependable. Always the lowest priced commercial car of its carrying capacity, this Speed Wagon is now a better buy than ever.

When you've seen these new Reos and heard the new prices, you'll say, Reo is today, more than ever, "The Gold Standard of Values."

Come in and see and hear the whole story. REO MOTOR CAR CO. OF NEW YORK, Inc. Broadway at 54th Street. Branches: B'klyn, 1380 Bedford Ave.; Newark, 520 No. Broad St.; New Rochelle, 462 Main St.

Reo Motor Car Company, Lansing, Michigan

WILLS SAINTE CLAIRE

The Mo-iv-den-um Car

No. 8—The Courtesy Light

THIS is another exclusive feature of the Wills Sainte Claire.

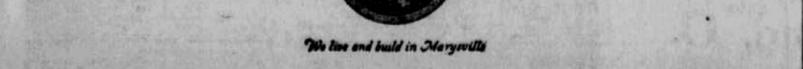
It is placed on the left hand side of the car just forward of the front door and illuminates the left hand side of the car and the road, reducing the headlight glare and enabling the driver of an approaching car to see exactly how much room he has for clearance.

It also protects Wills Sainte Claire passengers when entering or leaving the car.

We will be glad to have you come in and see the Wills Sainte Claire—Ride in it—Drive it. You'll find the car its own best spokesman.

WILLS SAINTE CLAIRE CO. of NEW YORK EDWIN B. JACKSON, President 1874 Broadway New York City, N. Y. Tel. Col. 8648

Open Evenings



We live and build in Maryland