

**FUEL ECONOMY IMPORTANT**

Important to Owner Because Lowers Cost of Mileage Operation.

**MUST ELIMINATE WASTAGE**

Defective Piston Rings Cause More Engine Trouble Than Average Motorists Credit Them With.

There is no feature of motor operation that is of greater importance to the average automobile or motorboat owner than fuel economy. With fuel prices mounting steadily and the extra speed, weight and comfort provided in the modern car or craft having also to be paid for in increased fuel consumption, the owner's only chance to keep his cost per mile curve from rising too steeply is to eliminate all possible wastage and secure the maximum amount of work out of every gallon in the tank.

Fuel is transformed into propulsion by exploding compressed gasoline vapor in a confined space within the cylinder, and the effectiveness of such explosion depends upon the amount of compression obtained. Proper compression is, of course, impossible where opportunity exists for this vapor to escape, and this opportunity is always present where faulty piston rings are in use. The type of ring most commonly found in use is the one-piece pattern and this ring is only effective when new. It rapidly develops serious defects by reason of many faults in both its design and construction.

The necessary bearing on the cylinder wall so essential to good compression becomes unequal, allowing the gas to blow down past the piston head. The openings in the rings provide another way of escape, as they are so often found to shift around until they get into alignment. In this condition they also allow surplus oil to get up into the combustion chamber and carbon deposit begins to form, resulting in bad sparking action, the danger of back-firing and the scarring and cutting of the cylinder walls.

Mr. Norris, president of the McQuay-Norris Manufacturing company of St. Louis, makers of leak-proof piston rings, says: "Defective piston rings cause more engine trouble than they are popularly credited with. The leak-proof ring, different from all other rings in design, corrects these defects. It has no unsealed opening, being composed of two interlocking, tightly fitting sections. Equal and sustained bearing is assured and lasting elasticity. Made of processed gray iron of wonderful toughness, these rings will outlast the motor."

Owners should examine the condition of their piston rings closely if they wish to save fuel, increase power efficiency and add to the life of the motor.

**Designs New Drive.**  
An important advance in motor car construction, new on the 1914 models of

ASSISTANT SALES MANAGER OF  
FIRESTONE TIRE COMPANY.



F. C. Blanchard,

several makers, is the enclosed speedometer drive. This is the invention of John G. Perrin, chief engineer of the Lester company, and its general utility has been recognized to the extent of being adopted as standard equipment on the Lutzler, Chalmers, Cadillac and Hudson cars.

**Expects to Enjoy Miles of Service in His Kisselkar**

"In view of the fact that the average motorist can only make a rough estimate as to the maintenance cost of his car, here is a letter that is refreshing," says Frank J. Edwards of the Kisselkar.

"This letter is from Chauncey E. Blake, a lawyer of Madison, Wis., who has kept his costs to the fraction of a cent, and included therein every possible incidental expense."

Mr. Blake's letter reads in part as follows: "I purchased one of your 1912 forties in December, 1911, and put the car in service in March, 1912."

"In 1912 my mileage was 5,128.6 miles. In 1913, 3,740 miles, a total of 8,868.6 miles. Since it started in service this car has cost just under 24 cents per mile for gasoline. The cost of oil and lubricants

has been 2.4 cent per mile. The cost of tires has been 4.8 cents per mile.

"The cost of repairs has been \$38.35, of which \$27.35 was expended for a coat of varnish. Insurance has cost me \$27.50, license, \$10; lighting, \$13.70; electricity, \$5; incidentals, such as anti-freeze and rubber tubing, \$25.30. The total charges for time against the car aggregate \$114.74."

"The car is now having its first general overhauling and on its being torn down completely I was surprised to find that the bearings, gears and all working parts showed absolutely no wear. When this car is reassembled I propose to have it painted, and, barring accident, it looks good to me for 200,000 miles."

**Carelessness and Fright Bring About Skidding Accidents**

"Carelessness and fright are the two big factors in most bad skidding accidents," says a manufacturer. "When the streets are slippery the best of drivers will have their troubles unless they use caution."

"And the first rule of caution, I would say, is to drive so that the sudden application of brakes will not be necessary at any time. For when the brakes go on hard and suddenly there is going to be an automobile doing a tango immediately."

"I warn all beginners—and some older drivers, too—to approach all street crossings with the car under control, without the brakes being used. Let the engine do the braking to slow up for a crossing. Then put on the brakes easily. If the car shows a tendency to swing around, release the brakes immediately."

"And then here is the one big vital thing to do. Turn the front wheels in the direction to which the rear of the machine is skidding. It is instinct to turn the wheels in the opposite direction. The result is that the skid is accentuated."

"When driving along the road and there is trouble on the right side, it is instinct to turn the wheels away from it. That is the reason the beginner will invariably make a skid worse."

**PAIGE COMPANY BUILDS SAFETY FIRST FACTORY**

The first two considerations in the building of the new factory of the Paige-Detroit Motor Car company have been safety and efficiency.

In probably no manufacturing plant in the country has the safety of even the most careless workman been more seriously considered and safeguarded. Paige-Detroit engineers have gone further than the usual safeguarding of machines, gears, belting and the like; they have planned and laid out production with the "safety first" idea large in their minds.

**Imp Cycle Car is to Be Seen at the Omaha Auto Show**

The Imp Cycle car has arrived and right from the start it promises to prove popular. It is manufactured by the W. H. McIntyre company of Auburn, Ind., and here sold by Mickell's Nebraska Cycle company. Though the smallest machine in the automobile class, it is far from being a toy. It is a complete automobile, built for two, said to be durable, is attractive, speedy and its low price of less than \$400 places it within the reach of nearly everybody. Fully equipped it weighs 600 pounds and can easily reel off forty to fifty miles per hour. The new machine is a ten to fifteen horse power tandem seating, friction belt drive car with all the possibilities of a big car in speed and durability.

This new car that gives promise of quickly jumping into popularity is especially pleasing in appearance. In front of the driver stretches a four-foot hood covering the power plant, while on either side stretches a shield, covering the belt. This shield blends into the rear fenders, producing a pleasing and finished effect. The tests show that the car will run fifty miles on one gallon of gasoline and the cooling apparatus is equipped with fins cast close together on cylinders and exhaust connections. The body is mounted on very elastic springs, thus making it one of the easiest riding machines ever put out. With the driver in front and the passenger on the seat in the rear, there is ample room for two persons.

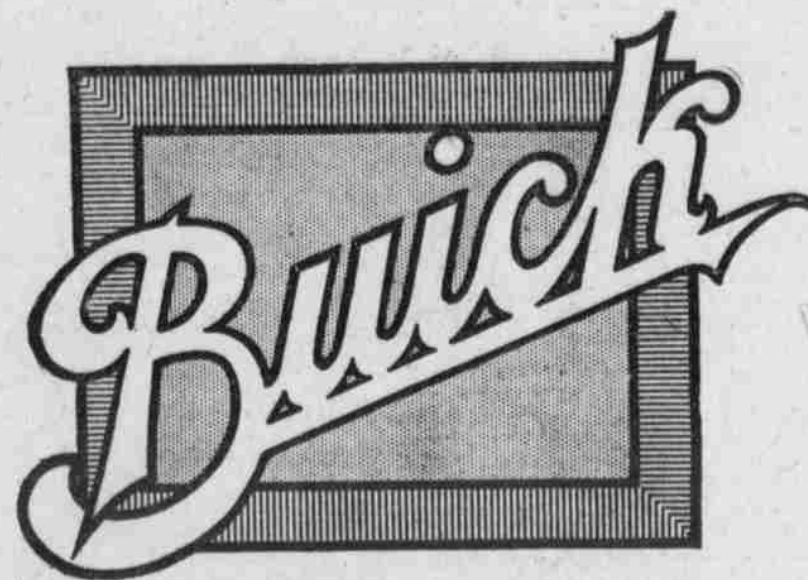
As a pleasure car for two persons, or as a vehicle for the business and traveling man to cover long distances, it is believed that it is unequalled and the prediction is freely made that a large number of the machines will be sold during the coming season.

**NEW YORK CITY BUYS MANY MUNICIPAL AUTOMOBILES**

"The world has seen some remarkable demonstrations of the development of the motor car industry in the last few years, but New York City provides the most striking illustration of how the self-propelled vehicle has come into favor," said John N. Willys, president of the Willys-Overland company of Toledo, O. "The report of the comptroller of the city of New York, recently made, shows that it costs \$37,500 each year for the operation and maintenance of municipally owned automobiles. This is an especially interesting statement when one considers that each of the several score of cars in use has replaced from three to five horses, for it gives one an idea of what the city was spending for maintaining its equine equipment heretofore."

**Tremendous Power, Speed, Endurance and Dependability**

Are Striking Characteristics of the 1914



The Buick was always considered an extraordinary motor car value—but this year it is greater than ever, for beside its already noted features, there is the added value of Electric Starting, Lighting and Ignition, Left Side Drive, Center Control and numerous other refinements.

The Buick is a "get there" car and a "get back" car—it calls for lowest cost of upkeep over longest period of service of any car at any price

Every Buick has the Delco system—it cranks the car, lights the lamps, ignites the charge in the cylinder. One system—and control from the driver's seat.

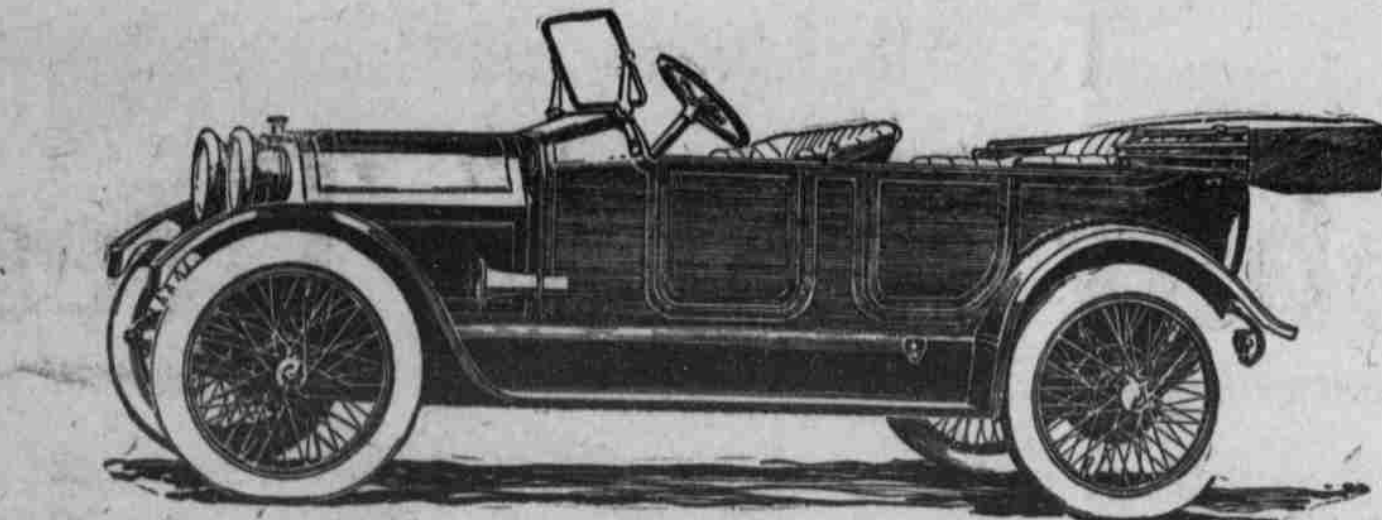
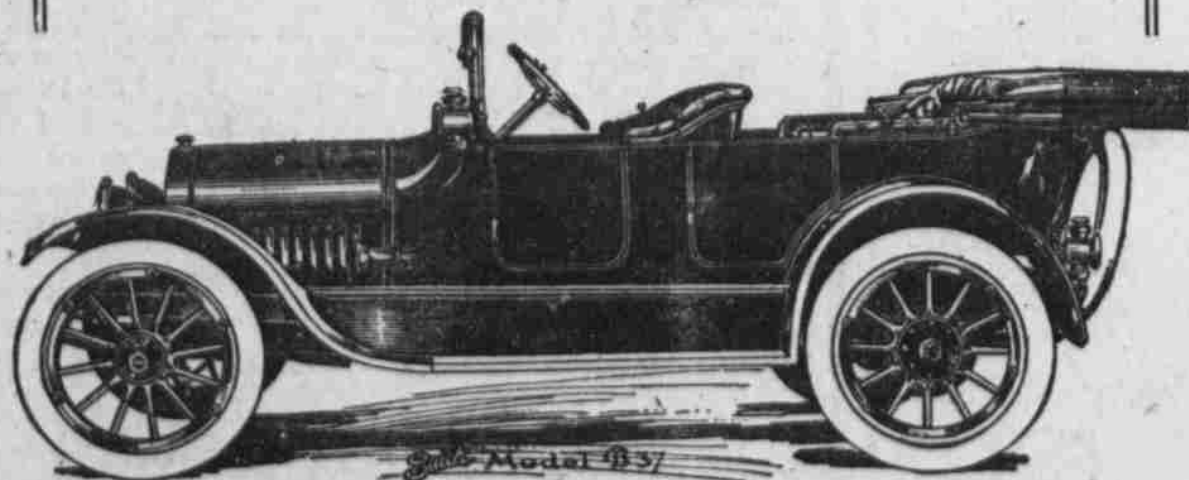
The Buick slogan is no mere boast—"When better automobiles are built Buick will build them."

The famous BUICK with the renowned overhead valve motor will take you further day by day and give you more motor satisfaction than you can find in any car—and the Buick is low in cost—an extremely extra value.

See the Buick Line at the Omaha Auto Show

**Nebraska Buick Auto Co.**

1912 Farnam St., Omaha, Neb.  
LEE HUFF, Manager



**EVERY MAN**

Who Owns An Automobile Now or Who is Going to Purchase One

—is interested in the—



**Kerosene Burning Cars**

BECAUSE THE HENDERSON WILL SAVE 66% OF FUEL EXPENSE.

**ACROSS THE CONTINENT**

A Henderson touring car with five passengers and baggage was driven from Indiana to Los Angeles on kerosene. The Henderson pulled mountains and skimmed deserts with only 10c fuel in the tank. Total of 4015 miles. Fuel cost less than \$7.00 per passenger. Average seventeen miles per gallon. Kerosene costs only one-half as much as gasoline and the Henderson will operate on kerosene or gasoline, and even greater mileage is obtained on kerosene. In the Rocky and Sierra Nevada Mountains none of the usual carburetor trouble was experienced. In fact, the kerosene carburetor revels in high altitudes.

4 Cylinder Models \$1,785.  
6 Cylinder Models \$2,285.  
Choice of wire or wood wheels.

**AROUND THE WORLD**

Edwin P. Kohl, a 1913 Wisconsin University Graduate, is touring the world in a Henderson, traveling on "kerosene"—in every country, in every climate, and under all conditions, the Henderson Car is making good on its cheap fuel. Gasoline costs from 40c to 60c per gallon in Europe and Asia. The countries toured to date include United States, British Isles, Germany, France, Holland, Austria, Russia and Italy. Mr. Kohl is now in Egypt, enroute to the Holy Land. Speedometer at Milan, Italy, showed 18,000 miles and the car without any mechanical trouble whatever. Coupe \$2,285.00.

\$25.00 extra for Kerosene Carburetor.

Our Henderson Coupe which will be shown here this week was conceded to be one of the classiest coupes at the Chicago show. We will have a complete line of Henderson Kerosene and Gasoline Cars. Our space No 25, north end of stage.

**T. H. Pollock Auto Co.**

HENDERSON DISTRIBUTORS

1910 Farnam St. Omaha Tel. Doug. 6292

Desirable Territory for Live Agents in Nebraska, Iowa, Mo. Dak., Colorado.