

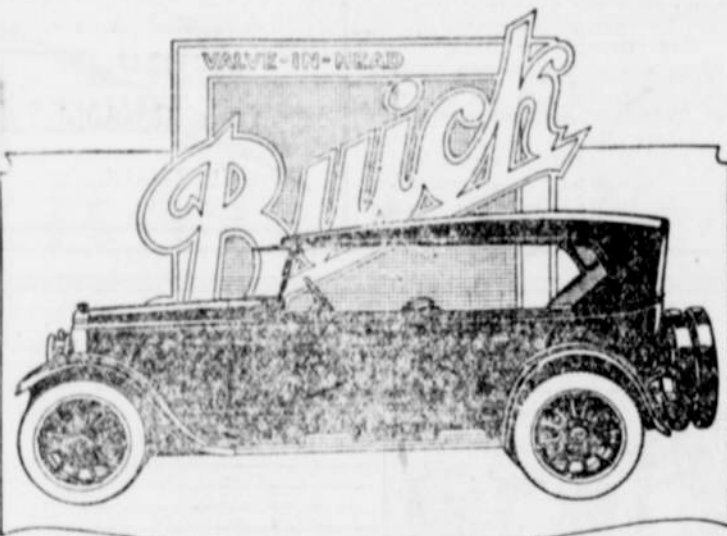
TRADE TALK OF MOTORDOM

A Fountain of Youth

Beauty linked with power that stays young—that's the Willys-Knight! The quiet Willys-Knight sleeve-valve engine improves with use—a fountain of thrills and satisfactions. In ten years we have never known a Willys-Knight engine to wear out! Touring \$1195, Coupe-Sedan Standard \$1450, 5-pass. Standard Sedan, now \$1695, f. o. b. Toledo.

WILLYS-KNIGHT

J. F. BURKE, Dealer
GRANTS PASS, OREGON



On Every Basis Buick Satisfies

Measured on the basis of appearance, comfort and utility, Buick more than satisfies the most exacting motorists.

Measured on the basis of day-in and day-out dependability, Buick has for years past set the standard for the industry.

Measured on the basis of enduring, trouble-free, personal transportation, Buick stands out as a car unique, distinctive and apart.

Ask any Buick owner.

Grants Pass Auto Co.

When better automobiles are built, Buick will build them

Read This Page Every Saturday

It contains a message for the motorist. . . .

APPRECIATION OF DEPRECIATION

A survey of the "well known used car situation" reveals that the average car depreciates at the rate of more than 40 per cent yearly. This percentage is not computed on trade-in appraisal, but on prices asked by dealers for used cars. Many dealers readily admit that they would not hesitate to deduct an additional 5 or 10 per cent from their used car prices to cash-in-hand customers. In other words: A \$1,000 car depreciates \$400 the first year, \$240 the second year, \$144 the third year, and so on.

Appreciation of this loss, which "works while you sleep" and regardless of whether you sleep, has awakened thousands of motorists to the fact that it is much less expensive to rebuild than to try to beat depreciation by frequent trade-ins. Moreover, the real feature of any automobile is its transportation ability, and not its age or design.

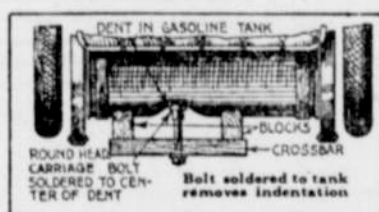
Good Driver Known by:

- His skillful steering.
- His ease of handling.
- His thoughtfulness of pedestrians.
- His properly adjusted steering apparatus.
- His strict obedience to every traffic regulation.
- His extensive and intelligent use of arm signals.
- His use of the brakes before he gets to the curve.
- His protection of his motor; his use of second and first speeds.
- His alternate use of foot and hand brakes on long grades and in emergencies.
- His avoidance of all obstacles, without endangering the occupants of his car, or any other car.
- His respect for railway crossings; he stops, looks and shifts gears before he is actually on the tracks.

Repairing Dented Gas Tank by Simple Plan

If ever the gasoline tank of your car becomes dented, the tank may be repaired simply in this manner:

The first step is to fill the tank with water and drain it, to avoid any possibility of a gasoline explosion when solder is applied. A round-end carriage bolt is then soldered firmly to the center of the dented portion of the tank. A crossbar with two blocks is



fitted over the dent so that the threaded end of the bolt passes through it. By means of a nut and washer on the bolt sufficient pressure can be exerted on the depression to draw it out flush. If the hole was made by a collision, the same method may be used and the opening filled with the solder left after the bolt is removed.—M. T., in Popular Science Monthly.

Window in Car Ahead Is Help to Avoid Crashes

The glass window light in the back curtain of the car ahead can be very useful. Through it a lot of dangers can be seen in advance, much to the advantage of the man who is in the wake.

Where cars are running abreast of each other so that the road cannot be seen by looking around the car ahead, it is best to drive just far enough in back of the other car to look through its window light and windshield at the street ahead. When a quick stop is necessary the stopping of the car ahead will not be unexpected—nor so dangerous.

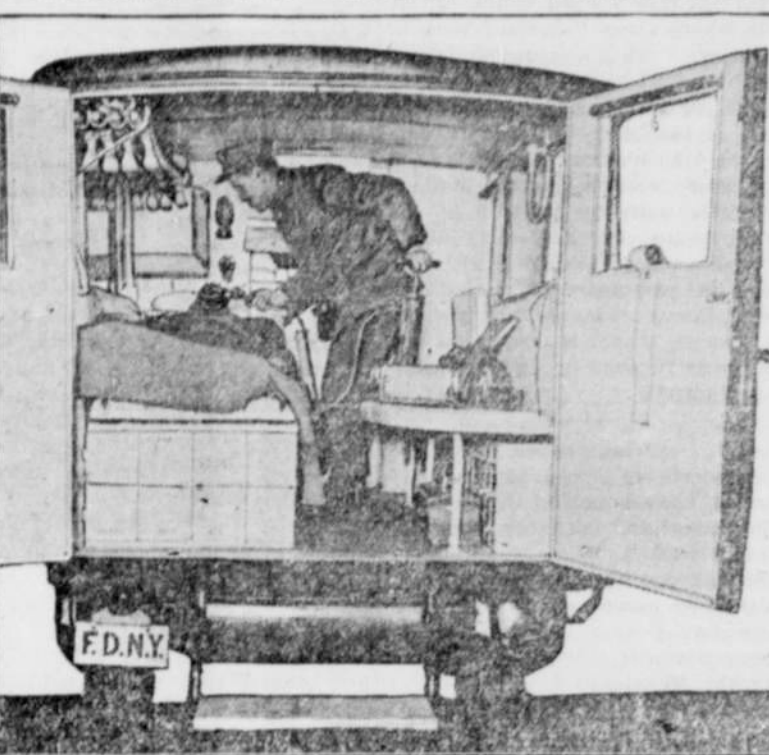
In close congestion where cars are moving very slowly, and only a few feet at a time, the stop signal can be saved a lot of unnecessary flashing, and the battery current saved, if the driver would use his emergency brake.

AUTOMOBILE NEWS

Backlash, when in the steering column itself, is usually due to depreciation of the gearing and wear in the various members which support the column.

A dynamo is a machine for converting mechanical energy into an electrical current; a starting motor transforms the electrical current into mechanical energy.

GOTHAM BOASTS UNIQUE FIRE AMBULANCE



The photograph shows the interior of the most complete ambulance that any organization can boast of. It is the property of the New York City Fire department and the gift of Messrs. W. F. and E. J. Kenny, honorary deputy chiefs. The Kenny brothers made this most unique and useful gift in memory of their deceased father who was Battalion Chief Thomas A. Kenny. During the first eleven months the ambulance was in service 1,401 miles had been covered in answer to 92 calls and the treating of 278 cases of smoke narcosis. After every run all equipment is sterilized with the most modern means. Photograph shows the interior of the car with Charles Leavy applying the oxygen pump to an overcome fire fighter.

AVOID TROUBLES OF CAR BATTERY

Reading of Hydrometer Is Best Way of Testing Its Strength.

(By ERWIN GREEN, President Green College of Automotive Engineering, Chicago.)

Learn to read the hydrometer, as it is the best way of testing the battery. Get one made of celluloid instead of glass, as this type is in less danger of breaking. A reading between 1.275 and 1.300 denotes that the battery is being properly charged by the generator. If the hydrometer reading gets down to 1.200 you may be using the lights or starter too much. If the engine is hard to start excessive use of the starter will run down the battery. If the car is not operated much during the day time the battery may not get enough current to carry the lights. In case none of these troubles are shown and the system still is at fault you should have the car taken to an electrical expert, as the generator may not be delivering the amount of current necessary.

Take Care of Terminals.

Keep the battery terminals tight and covered with cup grease to prevent corrosion by the battery acid. Prevent short circuits by watching the insulation of the wires and covering worn places with tape. The only attention the wires need is to see that they do not come loose or become short circuited. By going over the thumb nuts occasionally and glancing at the rest of the wiring such troubles will be avoided.

Watch the Ammeter.

Keep an eye on the ammeter to make sure that the battery is charging when the engine is running. When the car is running about twenty miles an hour, with all the lights turned on, the ammeter should show "charge." If it doesn't the battery will be discharged. This calls for expert attention. Also note when the ammeter doesn't "discharge" when lights and ignition are turned off. This is a short-circuit between the ammeter and switch and it must be found and corrected immediately. If the ammeter needle becomes bent, giving wrong reading, this may be determined by shutting off the light and disconnecting the wire from the ammeter to the switch.

The successful motorist is the fellow who learns by observation and who is constantly tinkering with his car. Try it out and find how much you don't know about an automobile.

Various Ways to Avoid Bad Service in Starter

The starting motor takes its current from the storage battery through brushes. It sometimes happens that these brushes for various reasons are not making proper contact, and this means more or less failure of the system. When trouble arises in this system these brushes should be carefully examined. Again one of the cells of the storage battery runs down before the others, which are therefore called upon to do more work than they are able to handle. Also a grain of grit or foreign matter may get between the contact points of a switch and make a world of trouble before it is discovered and dislodged.

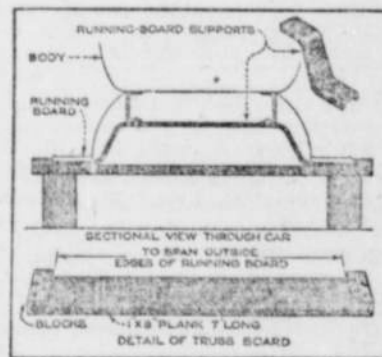
Driving Economies

- Well inflated tires.
- Proper carburetor adjustment.
- Brakes in correct working order.
- All working parts lubricated to assure smooth running.
- Disengage clutch whenever possible and coast.
- Obtain sufficient momentum when approaching a heavy grade to carry the car a considerable distance up the grade before changing gears.

Plank Support Prevents Bending During Repairs

The malleable castings, trussed by two rods that extend crosswise under the chassis, that support the running boards of a light car, have been dispensed with on the latest models, and two supports, made of channel iron, bent to the shape indicated in the drawing, have been substituted for them. This change of construction necessitates a change in the method of supporting the body while removing the rear end for repair.

If the usual method is employed, of blocking under the running boards, the latter, and the dust shields, are



A Plank Support Prevents Running Boards and Dust Shields from Being Bent by the Blocking Used During Repairs.

bent and otherwise damaged. To prevent this, a strong plank with blocks of wood securely attached to the ends, as indicated, has been found very satisfactory. The blocks fit on the outer edges of the running boards as shown, and prevent them from spreading apart when the car is jacked up and blocks placed under the plank.—Popular Mechanics Magazine.

Two Tire Mistakes

A mistake often made by car owners is to continue using rims that have been badly dented or even slightly bent. This causes rim cutting, which means the end of the casing's usefulness. Another error is to neglect to keep the valve stem and stay bolts tight. When this is not done water will get into the casing on wet roads or even when the car is washed.

Muffler Nut

The exhaust and the muffler tube are usually united by a large hexagonal nut, which frequently shakes off, due to the vibration incident to ordinary road travel and then follows a series of tremendous barks that will call the police of most municipalities. The best way to avoid the trouble is to drill both nut and tube with a small hole that will take a wire nail, which will hold the muffler firmly in place.

Real Battery Service---

Our BATTERY SERVICE means more than testing and watering your batter, cleaning, greasing and tightening terminals and hold downs, although it includes all these. It also includes expert advice which will help you to greatly prolong the life of your battery.

Our charge for this service is only 25c. "A service fairly rendered and fairly charged for is as truly service as though it were given free." Try it.

I. Rae Cowdin

"The Battery Shop"



Opposite Courthouse

Phone 127

Pathetic Road Pictures:

- The man who left the jack handle at home.
- Women who aren't good looking enough to attract Sir Ralghs to change tires for them.
- The party who washes the new sedan with laundry soap and a "clean" rag.
- Any car owner with an insured 1915 machine who sees a car thief pass along to the machine parked ahead.
- Folks who come to the sales-room ready to buy, but oblivious to the meaning of f. o. b.
- A driver whose rear-view mirror reveals the motorcycle officer on the trail.

India Leads in Oil Seeds. With a production in normal years in excess of 5,000,000 tons, India raises more kinds of oil seeds than any other country.

Back to Mythology. Lightning bolts, it is predicted, may be hurled in the next war. Zeus found them useful a long time ago.—New York Herald.

STAR CARS

Bigger, Better, More Beautiful.

You will come to a Star eventually — why not gets yours Now.

The Star is a Real Car.

There is a Real Service behind the car.



Flashing Lighthouses to Protect Motorists

Light signals have protected travel on land and sea for many years. Colored flashing signals will be installed this spring on the main national highways at crossroads, sharp curves and railroad crossings. The motorist of tomorrow will be guided by traffic signals that will safeguard danger points and minimize accidents.

AUTOMOBILE NOTES

No motor vehicle should be parked at the entrances to hotels, theaters, office buildings, large stores, and other buildings to which there is a great amount of coming and going.

The importance of efficient spark plugs cannot be estimated, says a well-known automobile engineer. Never wait until they miss fire and always buy the best quality obtainable.

Scale in the radiator can be overcome by mixing a little glycerin with the cooling water. The glycerin should be used in proportions of half a pint to each five gallons of water.

A slow leak in the tire valve plunger can be sometimes checked by applying a drop of oil in the valve stem. The oil partly dissolves the rubber, and causes it to anneal itself to an airtight joint.

Water which comes from a chalky district should not be used in the water circulation system because this results in deposits in the pipe and radiator. Distilled or well filtered rain water should be used.

We carry a full line of parts.

Smith Garage

Phone 65

Service With a Smile