

HOT BRICK PLAN GOOD IN WINTER

Electrical Connection in Garage Eliminates Many Starting Troubles in Morning.

KEEP WATER FROM FREEZING

Quick Start Can Be Made by Use of Vaporizer—Mixture of Salt and Glycerin Will Keep Snow and Rain From Sticking.

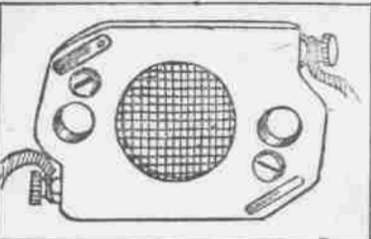
If there is electrical connection to the garage there should be no trouble starting off in the morning. The "hot brick" method electrified may be used



Hot Brick Device.

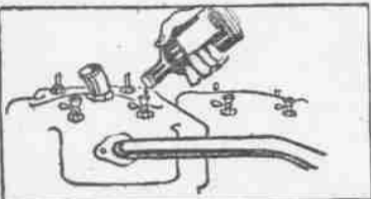
to keep the water system from freezing and the engine warm. Merely place the appliance on the engine and turn on the switch.

Instant starting in cold weather is promised by the use of this electric vaporizer. It is a heat-resisting case,



Electric Vaporizer Facilitates Starting.

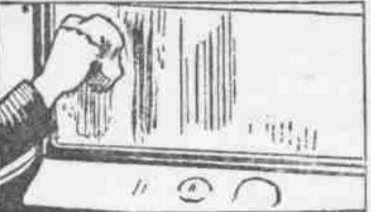
holding four wire screens, and is placed between the carburetor and intake manifold. The battery current heats the wires for about ten seconds, thus preheating the intake air and



Priming an Engine.

sprayed gasoline and facilitating the starting.

To prime the engine for starting, pour a mixture of high test gasoline and ether into each cylinder through the priming cups at the top. Then



Keep Off Rain or Snow.

limber up the engine with the crank and starting will come easily.

Prevent cold drafts coming up through the openings for the clutch and brake pedals, by gluing a piece of sheet rubber or leather to the bottom of the toe board, with merely a slit for the pedal arm.

To prevent rain or snow from sticking to the windshield, mix about two ounces of glycerin with one ounce of water and a dram of salt. Apply this to the glass with a cheesecloth. Wipe in a vertical direction only, so that the mixture will allow the rain to flow down and off the glass.

AUTOMOBILE NEWS

Turn corners moderately.

If the fan belt slips turn it taut out.

Change the water in the cooling system weekly.

More accidents occur on straight highway stretches than at curves or road intersections.

The latest style passenger automobiles are equipped with no fewer than 14 electric lights.

Gasoline left standing for considerable time, even if it be in a tank, will lose its ignition efficiency.

Gear-shifting at the proper time and in the proper way saves racking the entire mechanism of the car.

Motorists should stop when there is an accident, whether it be the operator's fault or not, and render all the assistance possible.

A car should be kept out of the sun until dry after being washed. Sunlight has a tendency to damage the surface of a wet car by causing the paint to check.

Death of J. B. Dunlop Pneumatic Tire's Inventor

John Boyd Dunlop, aged 81 years, commonly regarded as the inventor of the pneumatic tire, died in Dublin, Ireland, on October 25. He was a native of Scotland and came to Belfast, Ireland to practice as a veterinarian. Later he removed to Dublin.

Although his name has become a household word in the world of cycling, motoring and road traction, the inventor of the world-famed Dunlop tire, except for a short period as di-

rector of the original Dunlop Company was never in nor of the rubber industry, says the India Rubber Journal of London.

Accounts differ as to the circumstances under which he developed his idea for the use of pneumatic tires, a patent for which was taken out on the 23rd July, 1888. Probably the most reliable story is that said to have been related by Mr. Dunlop. His ten-year-old son had a tricycle which bumped grievously on the imperfect Irish roads. Mr. Dunlop felt that something ought to be done about it, and he set to work. "I formed the rims of the wheels," he said, "of American elm. I made an air-tube of rubber, covered it with cloth, and then with rubber again. My son rode this tricycle to Belfast, and people stared and laughed at the clumsy wheels, but he out-distanced other cyclists easily. In May, 1889, I turned out my first racing bicycle with the new tire, and it carried off all the first prizes at the Queen's College sports at Belfast."

Dunlop's aptitude might have passed into oblivion in the same way as Richard William Thomson's 1845 patent for an elastic tire had not Harvey du Cros, Sr., the amateur light-weight and middle-weight champion of Ireland realized its possibilities and joined forces with Dunlop.

The first pneumatic tire company was started in Dublin in 1889, and of the nominal capital of 25,000 pounds only about 13,000 pounds was subscribed. It was combined with a cycle agency, the prospectus putting forward that if the pneumatic tire did not succeed the cycle agency would pay dividends on the shares! With in four years, however, a dividend of 200 per cent was declared. When the tire factory was established in Dublin the resident of Merrion Square, the adjoining residential area, raised an outcry on account of the fumes from the factory, whereupon works were established in England, and the Lincoln Place premises were used as a distributing center for Ireland. Mr. Dunlop was often heard to deplore the fact that Irish people did not share in the benefits which an ever-increasing tire factory would have brought to them.—Tire Trade Journal.

Outlook Is Bright For Motor Business

The automotive industry is passing through a period which will end in the survival of the fittest and the demise of some weak concerns, while those strongly entrenched will get a firmer hold.

The close of 1921 found 105,988 more motor cars in California than during 1920, despite the fact that 1921 was a reconstruction year. This is revealed in figures compiled by the state department of motor vehicles and shows that there was no material degree of depression in this line so far



Be Sure You're Right About Your Battery

Your battery may seem to be so full of life that you may conclude everything is O. K.

But it pays to be sure, because batteries sometimes die very suddenly, right when they seem to be in the best of health.

Here at Battery Headquarters we know the facts before we tell you either that your battery is in good shape or that it needs repairs or replacement.

Everything's done here according to Willard National Standards of Service.

CON HILGERS

Battery Rebuilding and Repairing. Twelfth and Main Oregon City, Ore.

Representing Willard Storage Batteries

as California is concerned. The outlook for the future continues bright, with promise of greater prosperity in 1922 than has been enjoyed for a number of years.

There is also a splendid and growing market in the orient for American-made motors and tires, which is awaiting development.

International Starts Price War on Ford

Harold F. McCormack, who has been on a prolonged vacation, is back in Chicago at the helm of the International Harvester Co., and will direct the price war against Ford. While

he has made no definite statement as to his future plans, big reductions will soon be announced.

Mr. Estes, the local International Dealer has received a letter from his firm, stating that he could expect some of the biggest tractor news in the history of the business in a very short time.

The International is giving as a bonus, plows or other implements with each sale and in this respect has been followed by other firms.

Tractor dealers at the St. Paul convention were much surprised at what appears to be a price cutting contest and many of them have expressed the opinion that it could do no one any good. However we venture to say that the American farmer will lose nothing in the battle. It is an ill wind that blows no one any good and if tractor prices had held anywhere near the old level, the farmers under existing conditions, could not have bought.

"Flivver King" Buys Big Motor Plant

Henry Ford, multi-millionaire car manufacturer, purchased the plant of the Lincoln Motor company last week. It is a huge concern and manufactures high class cars.

The sale was conducted under bankruptcy proceedings but the "Flivver" was the only bidder for the huge concern. The price paid was \$8,000,000.

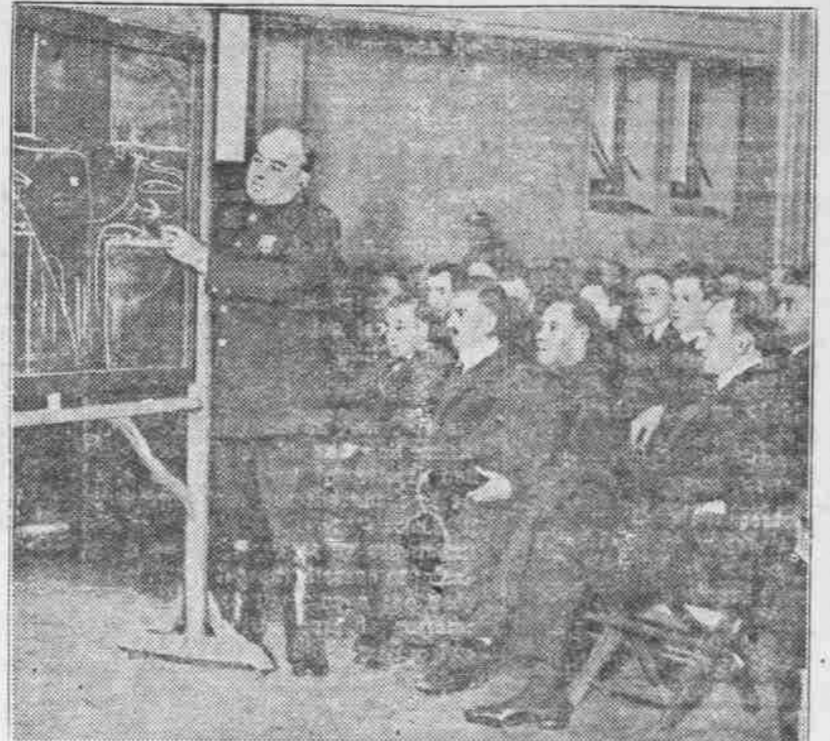
Ford claims to have bought this property as a result of his friendship for the owner of the Lincoln plant, Henry M. Leland, and his family. The former president will be retained in charge.

Immediately after the purchase by Ford, the automobile world was as-

tonished by the announcement that the prices of all models were cut from \$800 to \$1200 per car.

It is expected that the new owner will put the concern on a dividend-paying basis.

BLACKBOARD LECTURES GIVEN TO OFFENDING BROOKLYN MOTORISTS



Offending motorists brought before Magistrate FISH in the traffic court, Brooklyn, are punished in a rather novel manner. They are compelled to listen to a blackboard lecture, delivered by Policeman John M. Finnerty on traffic regulations and the rules of the road as shown in the photograph.

AUTOMOBILE PAINTING

A shabby looking car advertises neglect. Let us do your Re-Finishing.

WITH
O. C. AUTO PAINT SHOP
MILLER-PARKER CO.

FORD PARTS FOR FORD AND CHEVROLET CARS.

We carry the largest stock of genuine Ford parts in this county and have a practical and experienced mechanic in charge. His advice on your repair problems is free to you—use it. For the convenience of Chevrolet owners we have prepared a list of all interchangeable Ford parts. Telephone us for quotations or advice on repair work.

Pacific Highway GARAGE

At Elevator Oregon City, Oregon Phone 390

Standard Accessories	Guaranteed Repairs	Genuine Parts	Goodyear Tires	Convenient Storage
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"Equipped to serve YOU best"

AT THE FOOT OF SINGER HILL

STOP—
AND GET ACQUAINTED.

LOOK—
OVER OUR TIRE LINE.

LISTEN—
TO OUR OVERHAUL PROPOSITION.

Capital Garage

Less Crawford, Prop.

Ford

THE UNIVERSAL CAR

Effective January 27, 1922.

Chassis, Regular	\$405.66
Chassis, Starter	\$477.40
Chassis, Starter and Demt. Rims	\$503.01
Runabout, Regular	\$447.97
Runabout, Starter	\$520.86
Runabout, Starter and Demt. Rims	\$546.89
Touring, Regular	\$478.17
Touring, Starter	\$551.06
Touring, Starter and Demt. Rims	\$577.09
Sedan	\$787.42
Coupe	\$719.74
Truck	\$554.25
Tractor	\$492.85

F. O. B. Oregon City

Park-Shepherd Motor Co.

INCORPORATED

Main St. at 4th Oregon City Phone 355

DODGE BROTHERS

?

Wouldn't you like to know where the used car you intend to buy came from?

?

Who owned it in the first place?

?

How did he use it and what care did he give it?

?

These questions should be answered to your satisfaction. Come in and look over our stock of used Dodges. Everyone has a pedigree that guarantees your satisfaction.

Phone 77 **MILLER-PARKER CO** Oregon City, Ore.

"EVERY NEED OF AN AUTOMOBILE."

County Health Association MEMBERSHIP CAMPAIGN

February 14 to 28.

Do you know that in Your County, you have a Public Health Association, that its aim is to substitute Health and Vigor for Misery and Inefficiency, to keep well people well and bring help to those who are sick?

Do you know that it employs as its special agent, a nurse specially trained in Public Health work.

Clackamas County has, by actual county 59 diagnosed cases of Tuberculosis between the ages of 20 and 40; the efficiency period of life. Its other living cases total 119. According to the records of the State Board of Health, there were 7 deaths in the County in 1920 and 19 deaths in 1921.

The money spent thus far in this work was raised chiefly through the sale of Christmas seals.

The Portland Railway, Light & Power Company and the Willamette Valley Southern Railway Company have given free transportation to the nurse. The County Court has donated office space.

More money is needed. You will be called upon to do your share. 50 Cents will show your approval of this work, help finance it and give you a controlling vote in governing its policies.