

## HCW PACKARD PUTS HEAT IN THE GAS

**Tale of the Thermostat is Story of Science of the Automobile Engineers.**

### SHORTEN THE INTAKE

The present grade of motor gasoline and the old methods of carburetion do not work well together. The engineering problem, stated simply, is to heat the gas which comes from the carburetor to the cylinder heads. Now, contrary to general impression, gasoline is not a good conductor of heat. Just because in certain circumstances gasoline departs this earth with a bang most of us have got the idea that it is quickly affected by heat. But that's surface conclusion. The fact is, it is rather difficult to heat the tiny globules of gas that are sprayed out from the carburetor jet.

**One Trick.** In the new twin six-engine Packard engineers have handled this problem with much success. They have shortened the gas intake passages so the gas coming from the carburetor has less distance to travel—and distance always means cooling influence, unless otherwise provided against. The hot water that is being expelled from the cylinder jacket is put to warning the gas as it comes from the carburetor to cylinder head.

The water that is poured into the radiator top is circulated around and among the cylinders to cool them. In its contact with the fast-working cylinders it absorbs heat from them and itself becomes a stream of hot water. Then it is carried out to the radiator and there cooled for its return trip to the cylinders. On its journey back to the radiator it is at maximum heat just as it comes off the cylinders. While it is at this maximum heat it surrounds the gas intake pipe, and the incoming gas gets the benefit of a nice warm jacket.

**The Thermostat.** A little instrument called the thermostat, situated at the radiator inlet, diverts the water through a by-pass until it reaches the required temperature—then automatically allows it to pass through the radiator. The location of the thermostat at the outlet of the motor circulation system makes it possible to control definitely the temperature of the circulating water. The transforming of the gas intake into a short, hot conduit, with separate passages leading to front and rear cylinders, is the Packard answer to the gas-heating problem. And, of course, it is the more marked in its results because of the nature of the low-gravity gasoline.

## Pullman Plans Big Exhibits at Shows

Plans are being made by the Pullman Motor Car company for elaborate exhibits at the New York and Chicago shows, January 6 to 13, and January 27 to February 3, respectively. The exhibits will include the full 1917 line of four-cylinder models, consisting of the five-passenger touring, two-passenger roadster and three-passenger roadster, which have already won popular approval in the "under-a-thousand-dollar-class."

The Pullman exhibit at the New York show will occupy a prominent position on the main floor of the Grand Central Palace, this recognition having been awarded the Pullman because of its startling increase in sales and production in the last year. At the Chicago show the Pullman will be accorded the same acknowledgment of its success, a leading space in the Coliseum having been assigned to the company's exhibit.

## Detroit Electric Opens in Omaha

Announcement has been made of the opening in Omaha of a branch of the Detroit Electric company. The branch will be located in the Blackstone garage, under the management of E. M. Battom.

Mr. Battom comes to Omaha from the Kansas City branch of the Detroit Electric company, and seems quite enthusiastic regarding the Omaha field. Kansas City has been a garden spot for the electric car men, and Battom says Omaha looks just as good to him.

The Detroit people are making an electric car which will sell for \$2,175. This price is accomplished by the manufacture of a standard model. In most cases the electric car has been designed to meet the individual tastes, allowing a very wide range of selection in body designs and interior finish.

## Remodel Part of Studebaker Building

A portion of the second story of the Studebaker branch building is being remodeled and converted into a show room for used cars. The show room will be extremely well lighted by big windows and a stairway from the main floor is under construction now. In speaking of the remodeling, E. R. Wilson said:


"The used car business is part of our business just as much as the sale of new cars. We go to unlimited expense for a beautiful show room for new models, so why not spend a little to properly display used cars?"



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Electric Cranking, Lighting and Ignition.

**EXIDE**  
Storage Batteries

Did Your Battery Freeze Last Week?  
DELCO-EXIDE SERVICE STATION  
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Phone Douglas 3687.  
FREE BATTERY INSPECTION



## Regal Plant Not Sold, As Was Reported, Says the President

Notice has appeared in the automobile trade papers to the effect that the Fisher Body corporation of Detroit has purchased the factory of the Regal Motor Car company.

"This is an error," says Mr. Haines, president of the company. "The changes in our plant that gave foundation to this story have been made for one reason only—to increase efficiency and better our production. Those who know the Regal plant realize that it is pretty well scattered over a lot of ground.

"As we have now reduced the number of models we now build, and as we have greatly increased the efficiency of our manufacturing system, it was not necessary for us to use all of our buildings, and for some time past we have leased one of our buildings to the Fisher Body company. As we could not see that we would need this building for a long time to come, we recently sold this one building to the Fisher Body company, and this is the foundation of the erroneous report published about the sale of the Regal plant.

"The Regal plant, as it stands today, covers nine acres of floor space. Our production this year will be between 7,500 and 10,000 cars. We have this year a much more efficient organization and plant, and what is the best Regal car we ever made—a car that is acknowledged to be the best in its class.

"We have big plans for 1917, that are now in process of carrying out, and both dealers and the public are going to recognize that the 1917 Regal is one of the liveliest and best motor car propositions in the country."

## Something on How to Care for the Battery

"Perhaps the nearest approach that man has come to the secret of perpetual motion is typified in the electrical system of an automobile. Here we have a chain of links of which are the storage battery, starting motor, charging generator and the motor of the automobile," says Elmer Risengen of the Nebraska Storage Battery company.

"When the motorist presses the starting button, the storage battery sends the charge of electricity along the line to the starting motor, which spins the engine. As soon as the engine has started, it begins to turn the electrical generator, which puts back into the battery the current which the starting motor and ignition are taking out.

"In the booklet 'Your Electrical System and How It Works' the Willard Storage Battery company has succeeded in putting into language clearly understandable by the laymen the most important details of the electrical system.

"This booklet not only tells what the electrical system is and how it works, but it also tells how the system should be taken care of, why the simple steps in battery care are necessary, and has besides a double-page illustration or diagram of the electrical system showing exactly where the current goes and where it comes from."

## Goodrich Company Gets Good News of Silvertowns

Smiles wreath the faces of the Goodrich company officials these days. The following telegram is responsible:

"Silvertowns win Vanderbilt cup Santa Monica course, averaging eighty-seven miles per hour, breaking all previous records. Best previous Santa Monica speed seventy-eight miles per hour. Regular joyride for first four cars. Resta's Peugeot first, Cooper's Stutz second, Weightman's Deussenberg third. All on Silvertowns. Resta leads in world's championship contest."

## WOMAN DRIVES TO COAST FROM DENVER

**Mrs. C. T. Hamrick Pushes a Franklin Through Bad Roads Without Any Trouble.**

### FORDS THROUGH STREAMS

"They told us when leaving Denver five weeks ago we would never get through to Los Angeles; that such a long trip by women was too risky, but here we are and none the worse for our experience. And we didn't need a man. Our car, a Franklin Roadster, performed beautifully. A mechanic's services never were required."

This is the statement that Mrs. C. T. Hamrick of Denver, Colo., made to a Los Angeles newspaper man after driving, with Miss Blair, another Denver young lady, from the Colorado capital up through Wyoming to Yellowstone National Park, thence across Idaho and Washington to Seattle, south through Oregon into California and down the coast to Los Angeles, a total distance of at least 2,000 miles.

The women tourists found the going good from Denver to Yellowstone, but after leaving the Park for Bozeman, Mont., they struck roads through the Gallatin Pass that required chains on all wheels. Also between Butte and Missoula, Mont., the muddy roads with their sharp grades made going difficult, especially in crossing the Negehead Hills, Camel's Hump and the Bitter Root Divide.

In commenting on the road through Bluet's Pass approaching Wenatchee, Wash., Mrs. Hamrick said: "The road is exceedingly narrow and the turns so sharp that you have to back up several times before you can make them. There are no turn-outs and if we had met another car I don't know what we would have done."

### Ford Many Streams.

Going south from Seattle the tourists found it necessary to ford or ferry many streams. Extensive road improvements were under way and the detours were badly cut up and almost entirely lacking in bridges. The first California roads encountered were rather poor, but the Pacific highway atoned for those in a measure. After telling of the worst conditions, Mrs. Hamrick softened her criticism somewhat by saying: "The car proved so easy to drive and behaved so nicely that maybe I shouldn't have said anything about the bad roads."

Mrs. Hamrick had her Franklin looked over twice at cities en route but at no time did anything develop on the road to give trouble. More than 2,000 miles over mountain roads such as were encountered was a real test for both women and car. That the women thoroughly enjoyed their trip and found the car so comfortable for all-day driving, exemplifies the enormous influence weight reduction exerts in making a car easy to handle.

## Now the Omaha Auto Trade Association

The Omaha Automobile Show association is no longer to be known by that name. It is henceforth to be the Omaha Automobile Trade association. Its scope is to be enlarged, in the matter of its activities and in the matter of membership.

This was decided upon at a special meeting Friday when the articles of incorporation were changed. The amended articles are to be filed the coming week.

Under the new order all auto supply, accessory and service men are to be included in the membership. The association is to take an active part in good roads movements, and in all movements that affect the automobile industry.

## Haynes Mentioned in Bible As One of Hill Climbers

The man at the wheel: "Say, Bickens, did you know that the Haynes 'Light Six' was mentioned in the Bible?"

The man beside him: "No, old man; how's that?"

The man at the wheel: "The old testament says, 'She went up on high.'"

## Cold Weather Hits Auto Batteries Quite Hard

R. C. Smith, manager of the Delco Exide service station, says many batteries were frozen during the recent cold snap. He attributes that fact to owners' neglect.

"Remember," he says, "that a battery in a healthy condition is only 90 per cent efficient. In cold weather set your generator to charge as high as possible without direct injury to the battery. By adjusting the third

## The Franklin Enclosed Cars



Franklin Enclosed. Weight, 2540 Pounds. Price, \$2700.

**THE average motor car locks up your investment twelve months in the year, and does only about nine months' work.**

Any type of Franklin Enclosed Car will take you anywhere you want to go, city or country, 365 days in the year.

As you know, the Franklin is a great cold-weather car. Direct-irradiated—no water to freeze.

Its scientific light weight carries the Franklin Car over roads where the average motorist would not think of driving the average car.

And for summer driving or touring, Franklin Enclosed Cars, with their perfect ventilation and protection from sun-gleam and dust, have many advantages.

Whether or not you are thinking of a new car any time soon, by all means get acquainted with the utility of Franklin Enclosed Cars.

Franklin Motor Car Co., Omaha R-U-2-B-1 of 60

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## AUTO SPRING INSURANCE

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# DODGE BROTHERS ROADSTER

Its goodness is alone responsible for the unusual demand that has existed from the beginning.

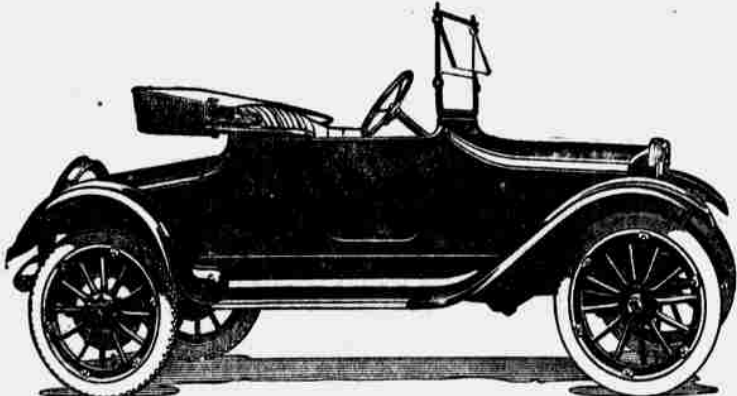
At no time since the first car was built has the demand been satisfied and yet in point of sales Dodge Brothers stand among the first five producers in the world.

It will pay you to visit us and examine this car.

The gasoline consumption is unusually low. The tire mileage is unusually high.

The price of the Touring Car or Roadster complete is \$785 (f. o. b. Detroit.)

The price of the Winter Touring Car or Roadster complete, including regular mohair top is \$950 (f. o. b. Detroit.)



**MURPHY-O'BRIEN AUTO CO.**

1814-18 Farnam Street. Phone Tyler 123. Omaha, Nebraska.

brush and the regulator spool of the Delco generators you get safety insurance, provided the adjustment is made by an expert. Our Delco service is free of charge and efficient."

## Federal Rubber Company Dividend on Preferred Stock

A meeting of the board of directors of the Federal Rubber company was held in the general offices of the company at Cudahy, Wis., November 10, at which meeting the regular dividend of \$1.75 per share on the second preferred stock was declared, payable November 25, 1916.

## Lucky Farmer Can't Sing Hymn of Hate

The high cost of living has not hit F. B. Jeffers, a Wyoming homesteader from near Moorcroft. Mr. Jeffers is in the city for a few days and in telling of what he has done during the last season, he says: "This year I sold my wheat at \$1.34 per bushel; potatoes, \$2.50 per 100 pounds; cream, 34 cents per pound; dressed hogs, \$11 per 100 pounds. "Coal does not cost us much, as

we are so close to the mines that we can go to them and haul it away. Our greatest expense is for gasoline for automobiles, but we must have that."

"Here in Omaha gasoline is selling for 17 cents per gallon, but out in Wyoming, close to where it is manufactured, it costs us 22 cents, but with things that we have to sell bringing such high prices we can afford to buy gasoline."

**How to Cure Coughs and Colds.** Keep out of drafts, avoid exposure. Eat and live right and take Dr. King's New Discovery; in use over forty years. Guaranteed. All druggists.—Advertisement.



**Turn-out—tour-out—confident that you are "in correct form"—and have power to meet every road emergency**

To the gentleman of yesterday every detail of his equipment was a matter of painstaking interest—when he drove his coach and four—or his coach and twelve.

The mode and appointments of the vehicle—the "cut" and trim of the harness—the number and size of the horses—even the weight and length of the whip—all had to be just right.

He was out before the world, and the world, he knew, was ready to accept him at his own valuation.

This instinct for perfection, during the entire motorepoch, the Packard is satisfied.

Style—comfort—safety—stamina—it achieves more than ever, now.

And the mighty Twin-six motor assures the heavier enclosed cars ample power for every emergency in city traffic or on country roads.

*Ask the man who owns one*

See the Orr Motor Sales Company, Fortieth and Farnam Streets, Omaha. Branch at Sioux City, Iowa.

## Packard TWIN-6



## Winter (Sedan) Tops

### Detroit Weatherproof Tops

Little need be said regarding the comfort and protection offered by the enclosed car. Those are accepted facts. The main thing is the additional cost and whether the top will fit perfectly without injuring the body.

The cost of this top is so low that anyone can afford it. It is beautifully designed and the workmanship is perfect. We can attach the top to any of the following models:

- Ford—Touring or Roadster.
- Buick—Model D-45.
- Overland—Model 83.
- Chevrolet—Model 490.
- Chalmers—Model 6-30.
- Maxwell—Any model.
- Cadillac—1916 models.
- Chandler—1916 models.
- Hudson—Super-Six.

**Dealers** The motoring public this year demands more comfort for winter driving, and these tops are selling very fast. We are distributors for the entire state of Nebraska and part of Iowa, and have some very good territory open in Nebraska and western Iowa. The demand is great. Why not cash in on it?

## Winter Top Company

C. W. FRANCIS, Manager.  
Phone Doug. 853. 2216-18 Farnam Street, Omaha, Neb.