

# FACTORY SOLVES HARD PROBLEM

Huge Power Plant Built by Dodge Bros. Fine Example of Engineering Skill.

The man who goes shivering to his cellar morning after morning to "lay on a few shovels of coal and shake the grate" will look with envious eyes on the immense new power plant now being completed by Dodge Brothers, Detroit motor car

manufacturers. Tons and tons of coal will be consumed there beneath eight huge boilers, but not one shovel will be in sight. It is to be a "shovel-less" plant from beginning to end. No coal will be shoveled in and no ashes will be shoveled out. Everything to be automatic. A car dumps its fuel cargo into a hopper and passes on. Soon another car comes and receives a load of ashes—and no human hand will have touched the coal in the entire process of transformation.

There are other equally remarkable features of this up-to-date plant which make a strong appeal to anyone interested in seeing how manufacturers today are solving problems which would have been put aside as impossible less than a generation ago. The power plant is designed for an

installed capacity of 40,000 K. W. and it requires approximately 25,000 gallons of water a minute for each 10,000 K. W. unit. There is not natural water supply within miles of the factory. To take water from the city mains and then waste it after passing once through the condenser, would be out of the question. Not only would the cost be prohibitive—it would be about 70 cents a thousand cubic feet or \$500 an hour—but the drain of the city's supply would be far too heavy. In other instances where similar problems presented themselves the solution has been found in a cooling pond, a large reservoir where the water was stored and used over and over again. In this case, however, so large a tract was not available. Not only are property prices extremely high, but there was danger that the spray rising from such a pond would damage newly manufactured cars and parts. So this plan also was abandoned.

From this problem or conglomeration of problems grew the plans for what has now become the largest cooling tower in the world—a structure 146 feet long, 32 feet wide and 104 feet high. It is capable of cooling 18,000 gallons of water a minute from a temperature of 105 to 85 degrees when the outside temperature is 72 degrees and the relative humidity is 99 per cent. With other atmospheric conditions, the water will be cooled to within 25 degrees of the existing dew point with a minimum temperature of 45 degrees. This tower effectively disposes of the problem which confronted Dodge Brothers construction engineers. It makes possible the repeated use of the same supply of water, with a loss of only 5 per cent due to evaporation. The tower is of the most substantial type, capable of withstanding a wind pressure of 90 miles an hour.

Four immense smoke stacks each 270 feet high and 18 feet in diameter, are being erected. They will be among the largest in the country. Although the power house was not started until May 18, 1920, it is now practically ready for operation. The first fire was started February 1. Many of the factory executives were present to observe the ceremonies. Built at a cost of \$3,500,000, the power plant is without question one of the engineering triumphs of modern industry. It is significant, in this connection, to observe that the entire plant was built by Dodge Brothers construction department. With this plant in operation, the factory is safeguarded against any future emergencies such as the breakdown of the central power plant, on which many of Detroit's largest industries are dependent.

The new power house is only one of a number of large expansion projects now in progress at Dodge Brothers. The total cost of which will be approximately \$8,000,000.



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To the  
**AUTO SHOW**  
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Until 10:30 P. M.

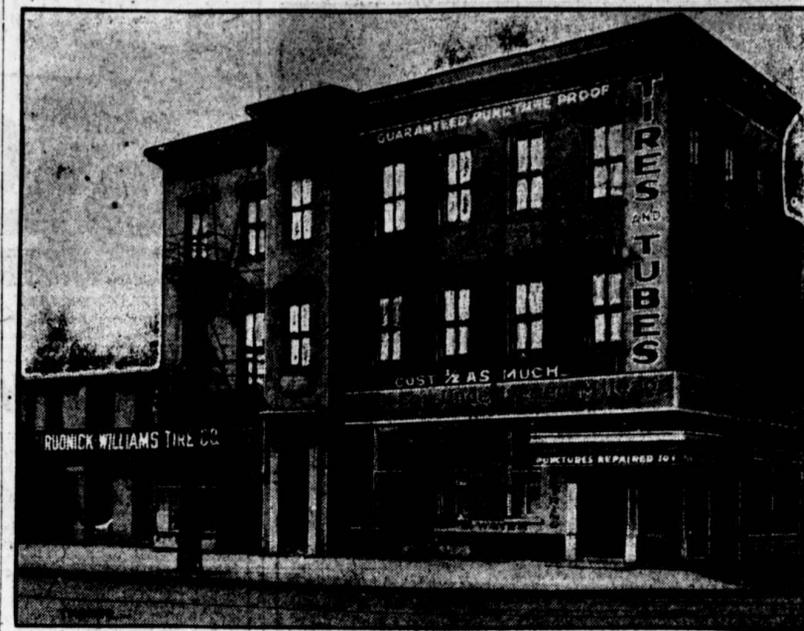
Auspices Washington Automotive Trade Association

### ALL THE FIXINGS

"Has this car got a speedometer?" asked an old gentleman to the salesman at the automobile show.

The latter was equal to the occasion and replied:

"At thirty miles an hour it exhibits a white flag, at forty miles a red flag, and at fifty miles a gramophone begins to play. 'I'm going to be an angel and with the angels dwell.'"



THE RUDNICK-WILLIAMS TIRE COMPANY, TWELFTH AND D STREETS N. W.

DELIVER 470,000 AUTOS OVER ROAD

Dealers Forced to Drive Cars From Plants Because of Railroad Congestion.

"In 1920 470,000 machines were driven over the highways from plants by dealers who could not get them any other way, owing to the congestion of the railroads, and also the fact that automobile cars are not in sufficient supply," says W. E. Metzger, of the National Automobile Chamber of Commerce. "If these machines had been shipped by rail they would have amounted to nearly 140,000 freight car load lots.

"The effect of congested railroad conditions on the automobile industry in turn on the general credit situation of the country early in 1920," he continues, "is indicated by the fact that at one time fully \$25,000,000 worth of completed machines, for which there was an immediate market if they could have been shipped, were awaiting car supply and railroad service in the heavier producing sections of the middle West. These deferred shipments had to be financed. It shows how congested conditions on the railroads add to the credit strain. If the industry had not resorted to the driveway plan, it is easy to see that very serious consequences to manufacturers and dealers would have resulted.

"At that time the railroads had more than 200,000 cars standing at junction points and terminals which could not be moved for one reason or another. This accumulation has been

gradually reduced and finally cleaned up.

"The industry has been agitated all during this period of stress in transportation matters by arguments pro and con as to essential and non-essential shipments and its right to the use of open cars, at the same time seeing automobile cars used by other industries. The sales and traffic departments took with considerable relief toward deliveries in the immediate future, realizing at the same time that even while operating at their best the railroads are not equal to the task of properly handling the business of the automobile industry when running at capacity, as evidenced by the large number of machines driven overland during the last year."

A speed indicator for motor vehicles has been invented that registers speed by the flash of colored lights. The mechanism is encased in a metal box fastened to the front of the radiator.

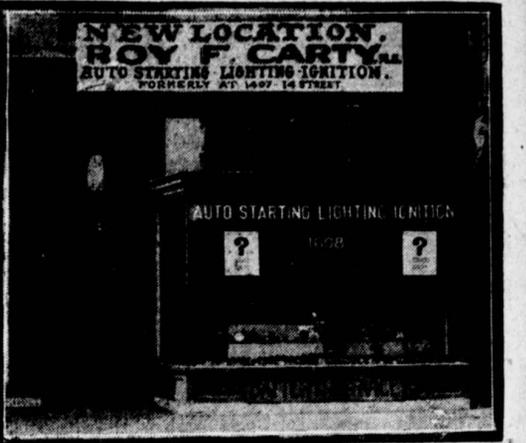


Commercial automobiles are displacing the oxcart and the collier in transportation of products in British Malaya.

Three-quarters of all families in the United States are financially in a position to own and operate automobiles.

Five hundred thousand freight cars are needed each year in the United States to carry automobiles, trucks,

THE well adapted new quarters occupied by Roy F. Carty. The firm of Roy F. Carty is well known to Washington motorists and has long borne an enviable reputation for efficient battery and general electrical work.



and finished parts, exclusive of tires and unfinished materials.

Because the loss ratio to premiums is no less than 85 per cent, insurance companies in the United States have decided to combine in an effort to check the theft of automobiles.

Municipally owned motor vehicles, including fire and police cars and trucks of all kinds, must be registered in Wisconsin the same as privately owned cars, and at the same rate of fee.

A commercial motor license in Toronto, Canada, costs \$13 for vehicles of two tons capacity or less, a rate of \$4 per ton or fraction thereof is charged on every car of over two tons.

As a supplement to their inadequate salaries, three superintendents of public schools in Georgia are automobile salesmen, and two are garage men.

There are twice as many garages in New York city as there were a year ago, and almost as many service stations and repair shops as there were blacksmith shops.

American-made passenger automobiles in Uruguay have become popular because of economy of gasoline and oil, speed, flexibility, lighting, self-starting, and appearance of body.

Dollars plus Car

Inspect the Lighter Six



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824 Fourteenth St.

# A LETTER—Of Interest to EVERY WASHINGTON MOTORIST

JOSEPH LEVY,  
INSURANCE  
423 SOUTHERN BUILDING  
15th and H Streets Northwest  
Washington, D. C.  
March 17, 1921.

Mr. James Alexander  
Cresttown Auto Supply Co.  
1501 Fourteenth Street N. W.

Dear Sir:  
On January 9, 1921, I was going to have the valves ground and the carbon removed from my Dodge Car (4 years old and run over regularly every three months) and on your suggestion I bought three gallons of LIGHTNING MOTOR FUEL. Instead of five gallons of regular gas, as you stated that it would do, I used only three gallons of LIGHTNING fuel. My object in writing you this letter is to tell you that I have used LIGHTNING FUEL since the date mentioned, and have not as yet been to the service station to have this work done. I am buying LIGHTNING FUEL on an average of twice a week instead of every other day as heretofore. My car is always full of "PEP" can without any trouble and it seems to grow better as I go along.

I want to take this occasion to thank you for inducing me to use LIGHTNING FUEL. I have always been afraid to use same as I feared it would do some damage to the engine. Thus far so good and if my car continues to thrive on this fuel that you so highly recommended I do not think you can induce me to use anything else no matter what the price.

Very truly yours,  
Joseph Levy

The Use of Gasoline Puts Carbon in Your Motor and Causes Trouble and Expense



TEMPLAR combines the merits of the best large cars together with the convenience or handling of the smallest ones, at a cost of up-keep and slow depreciation so small that you must inspect TEMPLAR construction to appreciate its inherent value.

To prove the TEMPLAR not only the finest small car on the market, but the lowest price car in up-keep, we will give any purchaser of a new TEMPLAR car a written guarantee to the effect that his total cost for repairs, barring accidents, for the first year of purchase will not exceed \$50—\$1 per week—and you should get along with no expense whatever, save for gas and oil.

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1901 14th St. N. W.

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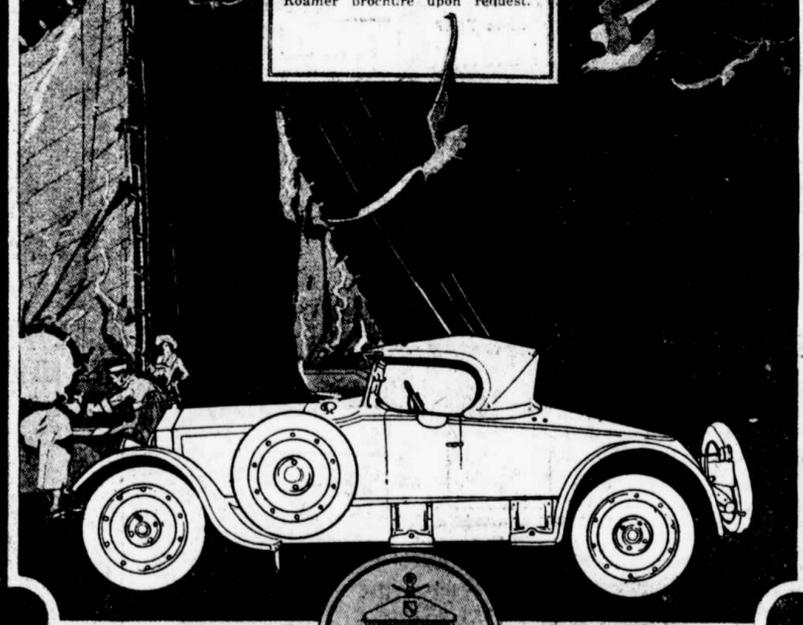
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