

PROGRESS MADE ON HIGHWAY PAVEMENT

Five Miles of Dallas-Salem
Road Hard-Surfaced.

DISPUTE HOLDS UP REST

Best Route to McMinnville Now Is
Declared to Be That by Way
of Town of Dayton.

After nearly a year of construction the Dallas-Salem highway has been paved and opened to travel for five miles west from Salem to the junction of the Independence road at Brunk Corner. The paving plant at Pola will be moved to Rickreall immediately and will begin to pave from Brunk to Rickreall as soon as it can be put in operation.

The new pavement will be a boon to travelers, the road is an important one for traffic between Dallas and Rickreall and Salem and, in addition, makes it possible to travel as far as Brunk Corner on the way to Independence. Most tourist travel is now moving from Salem to Corvallis via Independence on account of the fact that there is so much construction between Salem and Albany on the main Pacific highway.

Just how much more of the Dallas-Salem highway will be paved is problematical. The people of Dallas and the state highway commission are still in disagreement as to the routing of the west side highway. At present the commission has a trump card, as it can stop the Dallas-Salem highway any time it desires. Unless this controversy is settled amicably the paving may not extend west of Rickreall.

Dayton Road Better Now.
Grading operations have reached a point where it is possible to travel over the west side highway between Dayton station and McMinnville via Lafayette, but the grade is so rough that most drivers prefer to take the four miles of concrete pavement from Dayton station through Dayton and thence to McMinnville. The distance is about the same.

The new grade through Lafayette is on much better lines than the old road. Two railroad crossings east of Lafayette will be eliminated when the grading is completed, and several sharp turns will be smoothed out, as well as two or three deep dips into gullies. Two complete changes of line west of Lafayette will make the new road much more satisfactory for automobile travel.

West of St. Joseph the west side highway connects with the Tualatin highway at the north Yamhill river bridge, and from that point there is pavement all the way to McMinnville. The county hopes to get funds for a new bridge across the North Yamhill, which will materially shorten out the highway and cut out a severe dip.

Grade to Lafayette Rough.
North from the river crossing there is pavement all the way to Carlton, but it is not open for its entire length. Until the grade through Lafayette is leveled it is not recommended for tourists, as it is excessively rough in places.

McMinnville, Or., July 31.—(Special.)—Contractors have at last finished the eight-mile stretch of concrete pavement between this city and Carlton, and have moved their plant to the section between Carlton and Yamhill. This work will also be completed this summer.

The finished portion between McMinnville and Carlton will not be open for travel throughout its entire length until August 15, as the cement has to set for some time. There are two sections open for traffic, one between McMinnville and Howe and the other for two miles south of Carlton. There is a good detour for the unopened middle section.

The old bridge across the North Yamhill river will be replaced with a new structure as soon as Yamhill county can obtain funds. The new concrete highway is part of the Tualatin highway between Portland, Forest Grove and McMinnville, but between McMinnville and the North Yamhill river the pavement is also a part of the west side highway between McMinnville and Portland via Lafayette.

ASHLAND, Or., July 31.—(Special.)—It is approximately 22 miles from Ashland over the Siskiyou mountains to the California coast and the distance just about half is now hard-surfaced. There are four or five paved stretches totaling 10 miles, and even these pieces are welcomed by travelers, as they afford considerable relief in motoring.

No more crushed rock is being spread in advance of paving, and this, too, is a welcome change from old methods. It is planned to complete the paving this fall, as well as the



He Never Had Time

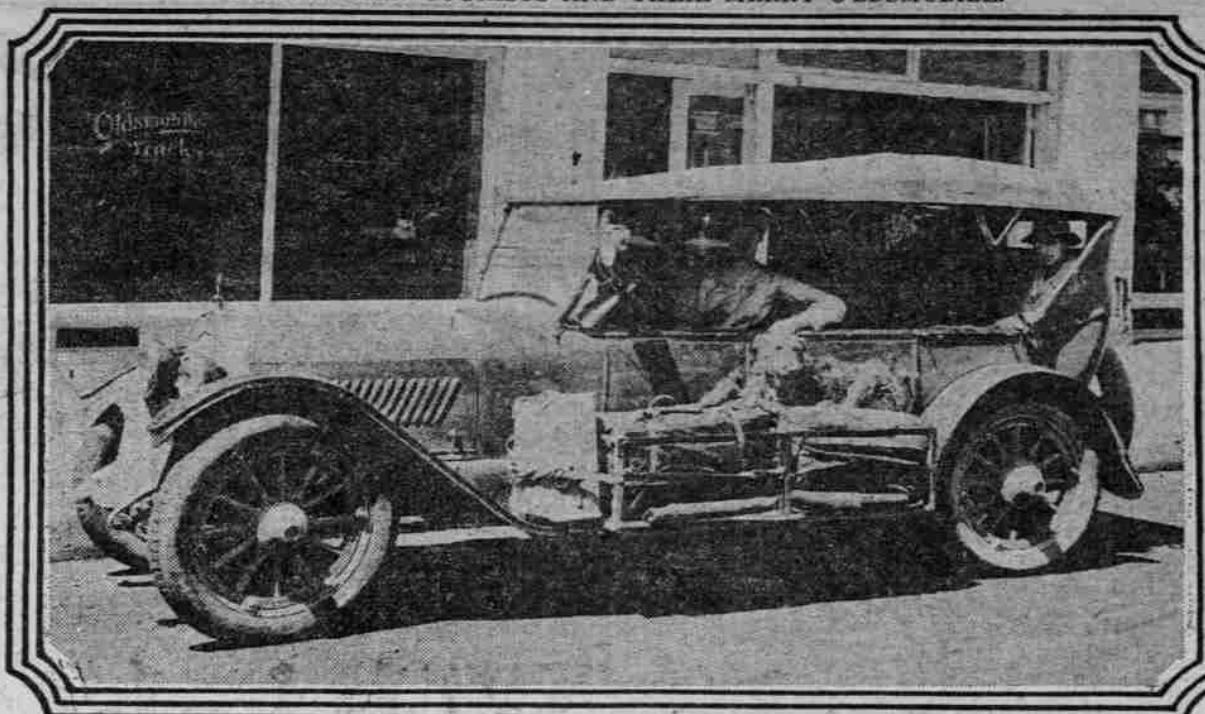
The other day a man lost two hours because his battery suddenly went back on him. He could have saved delay by keeping that battery shipshape.

Sidestep trouble by stopping in. Ask about Threaded Rubber Insulation—the kind selected by 136 manufacturers of cars and trucks.

WILLARD SERVICE
Ninth and Everett and East Burnside at Seventeenth



FOUR WOMEN TOURISTS AND THEIR MERRY OLDSMOBILE.



With Tango, the charming Alredale, as watchdog, burglar alarm, thug frightener, anti-theft lock and sole masculine member of the party, these four Milwaukee (Wis.) women reached the quarters of the Oldsmobile company of Oregon last week after a tour overland from Milwaukee that already has included two national parks and probably will take in a couple more of them before they return. The party includes Katherine Gormley, owner of the car, who drove all the way; Florence Minors, Lillian Murphy and Fay Jackson. They camped en route, taking in Yellowstone and Glacier national parks on the way. Touring conditions were not made to order for easy driving, either, as they found in the Dakotas, which they were unfortunate enough to hit in wet weather. But Miss Gormley proudly declares that the Oldsmobile never had to be towed. The car averaged 18 miles to the gallon for the tour and, with its 20-gallon tank, they had no trouble keeping gasoline enough on hand at all times. From Portland they left by Pacific highway for San Diego, with Crater lake and Yosemite national parks for side trips.

over crossing just south of this city, and if the work east of Grants Pass is completed there will be hard-surfacing on the Pacific highway all the way from the state line to Grants Pass, a distance of 67 miles. This section of pavement always makes a favorable impression on travelers coming into Oregon from the south.

NOW MEXICO WANTS GAS
Big Companies Building Filling Stations South of Line.

Authorities on the subject are looking forward to a huge success for automobile operation in Mexico. Along with the probable development of automobile business will come a great increase in the sale of gasoline and lubricating oils.

Many of the larger American companies that are engaged in the marketing of petroleum products are already preparing to build filling stations in all of the larger cities of Mexico. There seems to be a great need for them.

A number of new automobile agencies have also been established and new that industrial and commercial conditions have a good opportunity to obtain the right-of-way, there probably will be fewer second-hand cars shipped to Mexico with a large market for new models.—Motor Life.

Bridging the Barrier.

With the bridging of the Missouri river between Bismark and Mandan the greatest barrier in the national park highway will be removed. Tourists out of Chicago will find one difficulty less on the road to Yellowstone, Glacier, Rainier and Crater Lake national parks. Contracts amounting to \$1,200,000 have been signed with the federal government, the state of North Dakota and two counties contributing to the fund.—Motor Life.

100,000 HUDSON CARS SUPER-SIX QUALITY PROVED BY 100,000 OWNERS.

Car With Wonderful Motor Has
Established History in the
Motor Car Industry.

"Reaching the 100,000 mark at the Hudson factories is a significant accomplishment," declares C. L. Boss, of the C. L. Boss Automobile Co., Hudson and Essex distributor. He was discussing some of the outstanding features of the car and a little of the history of its making. There are five years of success behind the latest super-sixes and the 100,000 owners of Hudson motor cars place their fullest trust and reliance in them. In these five years, use has never revealed a shortcoming in the Hudson, and still there has always been an unrelenting effort at the factory to improve each year's models. The result of this policy is that the Hudson of today is the greatest of all Hudsons, which is speaking volumes. In the early days of the Hudson it won all the important stock car records for speed, acceleration, hill climbing and endurance.

"It is this last quality that has placed the Hudson in the position it occupies today. It has outlasted any other fine car in the world. Its endurance is responsible for the fact that so many early Hudsons are seen in constant and unfading service today. In use the Hudson is free from the annoyances so common in motoring. Mechanical difficulties have been overcome by two chief factors, the patented super-six motor and all

the rest of the car, designed to be fit company for such a motor. "The motor, by minimizing the destructive force of vibration, adds 72 per cent to efficiency. Whether the Hudson is a seven-passenger super-six, a speedster or other open model, or one of the beautiful and luxurious sedans or coupes, the same Hudson quality is built into it. I consider this season's closed Hudson the most appealing motor car ever designed. Mechanically it is the most perfect product modern genius has been able to produce. In equipment and appointment it offers everything a cultivated taste might desire. For luxurious comfort it leaves absolutely nothing to be desired. In endurance it measures up to Hudson standards in every respect, and more cannot be said. It is an all-season car that sets a standard in motor car design."

SCHWARTZ TRUCK LATEST

Two Models to Be Built by Company Formed at Reading, Pa.

READING, Pa., July 31.—The Schwartz Truck company has been organized with a capital of \$1,500,000. A site for a plant consisting of two units, each 45x30 feet, has been purchased. It is expected construction work will be completed early in 1921. Three standard models will be one and one-half, two and one-half and five tons.

Very Well.

"On May 12 we sent you a Columbia automobile publicity story, the first sentence of which read: 'The incentive behind the sales of 90 per cent of the automobiles is woman, lovely woman.' This should have read, 'The incentive behind the sales of 90 per cent of the automobiles is woman, lovely woman.' Will you kindly change this word 'lovely' to 'lovely' when using the story?"—Motor Life.



The Buick Model K 49

WHEN you purchase a Buick Model K 49, you will find that no seven-passenger car can possibly give greater value, better satisfaction, higher efficiency or more refinement of detail.

With beautiful body lines — with large, comfortable seats and tonneau, assembled on a chassis equipped with the famous Buick Valve-in-Head Motor, this model meets every requirement demanded in a dependable touring car for use under all conditions.

We Can Give IMMEDIATE DELIVERY at This Time

When better automobiles are built, Buick will build them

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GREAT OIL SUPPLY IN BED OF SHALE

Vast Quantity Available in
Utah and Colorado.

COUNTRY'S FUTURE SAFE

Colorado School of Mines Professor Tells of Cooking Process Needed to Obtain Oil.

The alarming rapid depletion of America's petroleum supply, which threatens soon to put this country out of the running as an oil producer, is visualized only by a temporary embarrassment by Professor Victor C. Alderson, dean of the Colorado School of Mines, who was in New York recently on his way to Europe, says the New York Tribune.

"Our salvation lies not in drawing petroleum from oil fields, which are rapidly playing out, but from an industrial process of 'cooking' petroleum from oil shale, which abounds in the very ground surface in inexhaustible quantity in Colorado and other western states," said the dean. "Last year the United States produced 366,000,000 barrels of crude petroleum and consumed 436,000,000 barrels, a shortage of 70,000,000 provided in part by importation from Mexico and drawing from reserve storage."

Crude Oil Situation.

"The price of crude oil is today the highest in history. Before the war Pennsylvania crude oil sold for \$3 a barrel. It now sells for \$6.19 a barrel. Mid-continental oil from the Kansas and Oklahoma fields sold for \$3 cents a barrel before the war and now brings \$3.50. The rate of increase has been about the same all over the United States. The oil fields of Kansas, Oklahoma and Wyoming have not yet reached the 'peak' of production, but elsewhere the supply is on the down grade.

"The crude oil situation in this country is alarming. Gasoline, the refined product of petroleum, is now selling at 33 cents a gallon. By autumn it will sell for 40 and higher after that."

This situation is not an economic one, but an exhaustion of nature, according to Professor Alderson. Nature, however, has come to the rescue with oil shale—oil-bearing rock—which must take the place of oil fields and "gushers" and which brings oil

production down to a manufacturing basis.

Not Compressed Oil.

"The supply of oil shale in Colorado and Utah alone," declared the professor, "exists in tremendous and unlimited quantities. In Colorado there is enough of it immediately available for 100 refert plants using 2000 tons a day to work 800 years. There is seven times as much available oil a square mile from a ten-foot vein of oil shale as has been produced or will be produced from a square mile of proved oil ground."

"The shale crops out of the surface of the ground in strata form. There is so much of it above the surface that we need not worry about the lower levels. Digging for it would be a useless expense."

"It should not be imagined that oil shale produces petroleum by simply compressing it," Professor Alderson explained. "The rock does not contain oil as such, but the constituents of oil—the carbon and hydrogen. There already are thirty processes for heating or cooking shale in experimental stages. To use a simple illustration, oil shale is the fabric of just as the ingredients for bread are mixed together, but which do not become bread until they have undergone the process of baking."

"Oil shale must be treated in retorts which apply uniform heat and the process is still having its technical difficulties, not in the production, but in the best method of producing the maximum amount of good oil."

Crude oil produced from shale, he says, can be sold for a maximum figure of \$1.45 a barrel, as against the minimum price of \$3.50 for the product of the mid-continental fields.

Truck Company Growing

New Factory Increases Its Capital Stock to \$400,000.

MT. CLEMENS, Mich., July 31.—The stockholders of the Reynolds Motor Truck company have authorized an increase in the capital stock to \$400,000. The new stock will consist of common stock only and will be offered first to the present holders of stock. With the increase in business slightly less than nine months, one completed truck a day is being turned out from the factory. A 10,000 square foot addition to the present plant is being rapidly completed.

Looks for New Site.

The E. A. Nelson Automobile company in Detroit is reported to be seeking a factory site in Rome, Mich. It is planned to build a plant to produce 2000 cars a year.

TIRE PRICES ARE STABLE

RISE SLIGHT, DESPITE HIGH MATERIAL COSTS.

Martin F. Swift of Canton Cord Distributors Reviews Situation for Few Years.

Compared with steel, which is regarded as the barometer of prices in this country, prices of tires in the past 18 years have remained very stable in spite of the high cost of rubber and cotton, according to Martin F. Swift of the Howell-Swift Tire company, distributors for Blackstone and Canton cord tires. Mr. Swift, who has been in the tire business a good many years, has long studied the tire situation.

In comparing the prices of raw materials that are used in making tires, says Mr. Swift, the prices of tires today are not based on the prices of cotton today, as the fabric that manufacturers are now using was bought in 1919, while the fabric that will be used in the last six months of the present year was bought in 1919, and contracted for in the early part of 1920.

Except in 1913, steel sold evenly from 1910 until 1914, the beginning of the war, when the price steadily soared until 1917 when the selling price caused by war demands reached its peak. The latter year saw a sharp decline which continued in lesser degree until 1919, when there was a slight rise to a point where it stands today.

In 1910 the average price of a 34x4 fabric tire was \$4. This figure declined steadily until 1915 when a bottom figure of approximately \$3.50 was reached. In 1915 cotton reached its lowest figure, and it was in that year that everyone was urged to "buy a bale of cotton," and save the south from financial ruin. Although rubber prices at a higher figure in 1915, the rise was not sufficient to materially affect the cost of tire manufacture as against the exceedingly low cost of fabric.

As the war progressed, the demand for rubber and rubber increased tremendously and the price of both materials rose in proportion with this demand. With the cessation of hostilities, unlike steel, the demand for both continued to increase. While the supply of rubber is ample, there is a very inadequate supply of long-staple cotton, which holds the market at sky-high figures. Since 1915 the price of this has increased over 600 per cent. In conclusion, the chart demonstrates that as compared with steel, the price of tires, which now give double the mileage they did 10 years ago has remained stationary.

Tractor Economy.

Statistics regarding the use of tractors have been obtained by the Bureau of Farm Management of the Department of Agriculture from 500

replies to a questionnaire sent to farms in Central Illinois. It has been proved that with a 28-inch horse-drawn plow one man accomplishes from 70 to 80 per cent more than with a single bottom plow. One man with a 28-inch plow drawn by a motor tractor covers 30 to 35 per cent more ground in a day than does a man using six horses on a horse-drawn plow of the same size. A three-bottom plow drawn by a suitable tractor enables one man to accomplish from 60 to 70 per cent more than does the two-bottom plow drawn by six horses.

WOOD WHEEL MAINTENANCE

Little Paint Needed Now and Then to Preserve Wood.

Every motorist knows that the wheels are subject to thousands of road jolts in every mile traveled, that they withstand enormous side thrust on every trip, that they work constantly in so far as they support the weight of the car at all times; in the background and prompts the motorist to pass the wheels without examination when he makes an inspection of his car.

Considering that wood wheels are working parts, and their duty is a grueling one, this is hardly fair. The scratch that develops rust on another part of the car is quickly painted over. But how about the scratches that expose the grain of a wood wheel to the elements? They are rarely attended to, even though a little dab of paint, or varnish, in case the color cannot be matched, will help to preserve the wood.

Very little attention is necessary. When tires are examined, it only takes a moment to glance at the wheels. If the hub flange bolts require setting up, a few minutes and a handy wrench are all that is necessary.—Motor Life.

VELIE RUNNING TO CAPACITY

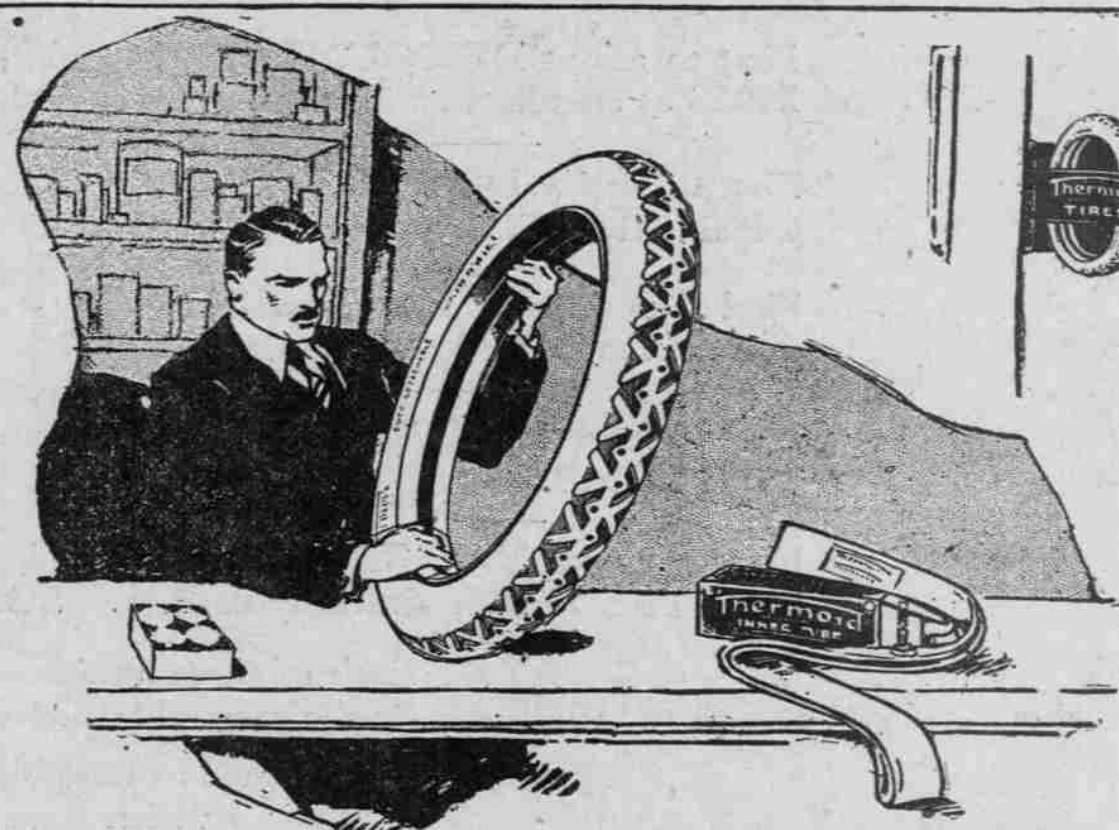
Company Looks to Europe for Big Future Orders for Cars.

MOBILE, Ill., July 31.—Velle Motor corporation continues at capacity production. This plant has maintained a production of 50 to 70 passenger cars a day and 300 trucks a month, despite the transportation collapse. President Willard Velle is en route to Europe, where he will investigate the general situation on the continent in regard to sales of American cars. He will visit England, France, Spain, Holland, Belgium and Scandinavia, in most of which countries the Velle corporation has branches.

Wright Joins Republic.

B. F. Wright, chief engineer of the Federal Truck company, Detroit, has resigned to join the Republic Motor Truck company, Alma, Mich., as chief engineer.

Don't leave your car with motor running.



New non-porous tires now offered to motorists

One-inch strip stretches to 7 7/8 inches

AT last it is possible to secure the kind of tire you have always wanted—a tire that is free from the basic fault of ordinary rubber and gives longer mileage with less trouble.

Ordinary rubber is porous. Because of this great flaw ordinary tires must weaken and disintegrate on the road, absorbing moisture, grit, grease, oil and other injurious substances. The tread becomes weakened in spots—later the tire fabric. Premature punctures may occur, sand-boils may develop—tread separation goes on unseen—finally a nasty blow-out follows.

Due to the discovery of a remarkable compound, these common troubles can now be greatly reduced. Crocid Compound, first produced in 1917, makes tires non-porous. It seals the millions of tiny

pores. It makes rubber practically impervious to moisture, oil and grit. It prevents rapid disintegration.

Crocid Compound Tires now available

Made of Crocid Compound, this new rubber is 50% to 100% tougher than ordinary rubber, and yet resilient. A one-inch strip stretches to 7 7/8 in.

Because they are made with this remarkable compound, Thermoid Tires eliminate the premature trouble you experience with ordinary tires. Either the cord or fabric tube gives maximum mileage under all road and weather conditions.

You are invited to call and see these new tires, also the famous Crocid Compound tubes. Let us tell you interesting detail facts, experiences and tests that show why Thermoid tires and tubes end premature trouble and give better mileage.

ALLEN & HEBARD CO.

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J. A. Dary, 42 North Grand Avenue

Thermoid TIRES

Crocid non-porous rubber gives extra wear

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