

MILE-HIGH TRACK USED FOR TESTING PNEUMATIC TIRES

Speedway Is Fitting Climax to
Trip Through Factory Located
in Shadow of Rocky Mountains

GREAT CARE IS EXERCISED

Every Precaution Taken to See
That Product Not Alone Is Up
to Standard but Is Improved.

The only mile-high speedway in the world for the testing of automobile tires is located almost within the shadow of the Rocky mountains, on the roof of one of the large factory buildings of the Gates Rubber company of Denver.

After a trip through the factory a very fitting climax is a visit to this speedway, not only for the purpose of witnessing the tire testing device, but to gain an uninterrupted view of a most impressive panorama of mountain and plain.

In the factory, the sharp cr-a-c-k-ing sound of the rubber, as it is forced into the numerous milling machines, the boom and roar of the machines themselves, and the innumerable operations necessary in preparing the crude rubber for use, fill the mind of the visitor with wonder at the ingenuity and resourcefulness of man.

He watches with interest each operation in the building of the Gates Half-Sole tire, all parts of which are done by hand. He is taken into the storeroom, where there are always from 40,000 to 50,000 Half-Sole tires on hand to supply the demands of dealers in more than 600 cities in the United States.

Going out onto the roof, where this testing machine is spelling "quality" into every Half-Sole tire, the visitor is again filled with wonder at the ungettable beauty and sublimity of the mountain scene before him.

Charles C. Gates, president of the Gates Rubber company, remarked that the Mile-High speedway, simple as it is, has been a material factor in the perfection of the Gates Half-Sole tire to its present high standard of durability.

This is true because the Gates Half-Sole tires undergo all of the wear and tear of actual road conditions, from the level cement roadway of the city to the rough and treacherous road conditions of the mountain. No leniency is shown and the exacting conditions of the test adequately demonstrate the wearing qualities of the Half-Sole tires.

The machine itself is comparatively simple, consisting of a long arm, revolving in a huge circle, on the end of which is attached the Half-Sole tire. A weight equivalent to that of a heavily loaded automobile is suspended over the tire in such a way that the tire itself carries the load.

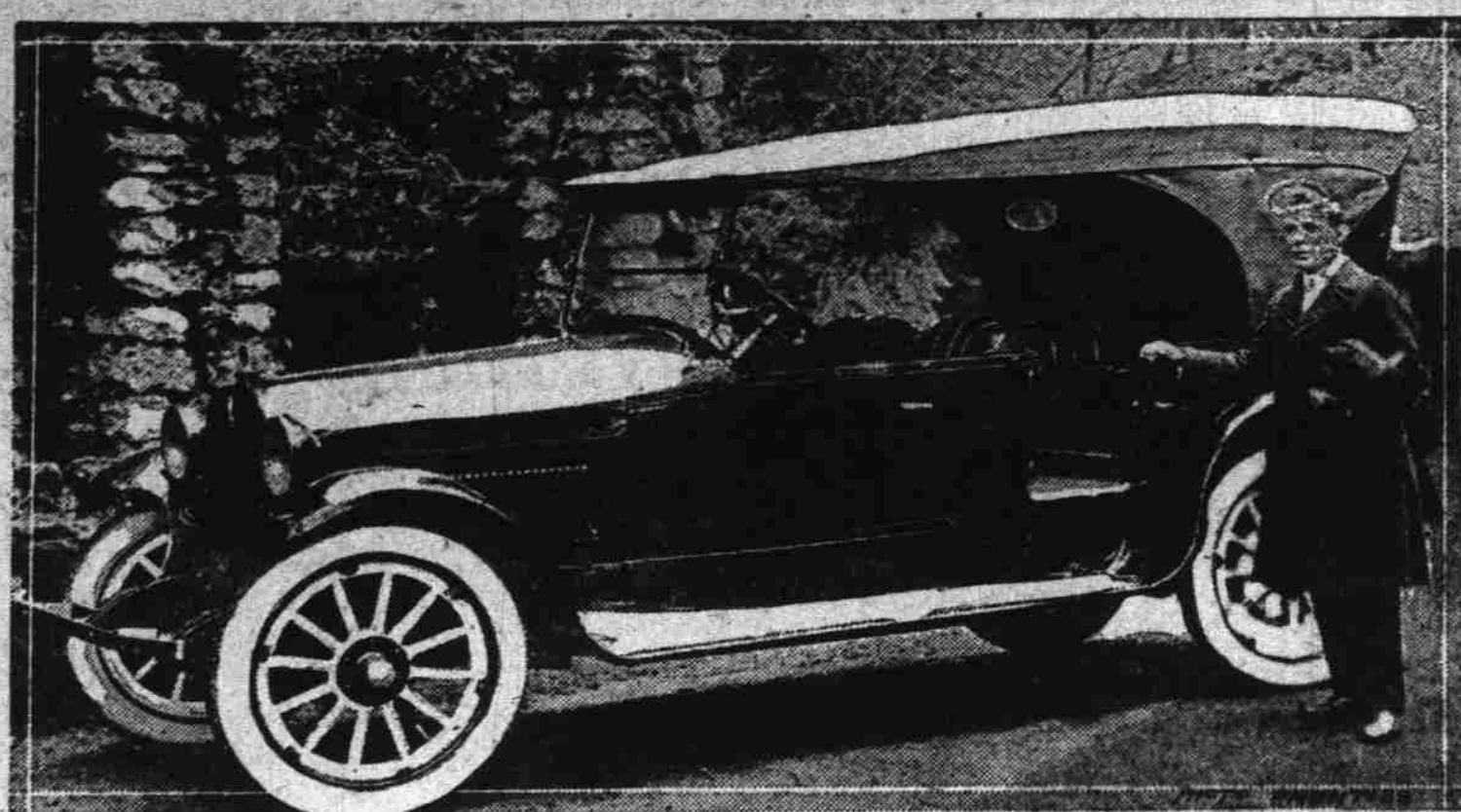
The track on which this tire travels is one-half mile long and its construction reminds the visitor of a "sky-line boulevard," with its ups and downs and the attendant thrills which characterize a ride over this type of roadway.

A stretch of cement trackway gives the tire momentum, and when it has reached a speed of approximately 35 miles an hour it strikes a sandy stretch which causes it to jump and skid. From here it travels over a imitation brick roadway in which some of the bricks are missing, and then plunges into mud and water. Then up an incline representing a rough mountain road, it comes to a 45 degree slope, where it is necessary to jam on the brakes. Thus the tire continues its travels all day and every day until it has given its maximum of mileage.

Tire experts are always "on the job" to observe the wearing effects on the tire. No phase of the wearing process is overlooked and whenever a defect is discovered, although it may appear to be of the minutest importance, steps are taken to effect a correction.

Thus the mile-high speedway itself has resulted in the establishment of the "More Mileage" slogan for the Gates Half-Sole tires, and its vantage point for observation has made it the most popular point for those who find it possible to visit the Gates Rubber company factory.

LATE MODEL SEVEN-PASSENGER CAR



Alfred J. Mourton and Case passenger car

Motor Truck One Of Big Lessons of War, Says McKinley

By William M. McKinley,
Congressman from Illinois

Washington, April 12.—(I. N. S.)—One of the great assets in the solution of the high cost of living problem and thus making business good is the home food producer and the other is the motor truck. The cities are getting nearer the solution of the food problem, as far as we here at home are concerned.

A big lesson of the war was that of the motor truck and its part in solving transportation problems. The motor car is just opening, for it means the bringing together of the point of production and the point of consumption. A great amount of foodstuffs must be shipped abroad. This calls, of course, upon foodstuffs that will stand long shipments.

Right here is where the Victory gardener has his opportunity, for in the production of food close to the point of consumption he helps to feed himself and therefore helps to feed the world. The national war garden commission has just informed me that a bigger campaign than ever is under way throughout Illinois. That is as it should be, for the Victory garden grows thrift as well as vegetables.

If the coming generation can be taught the value of land and what can be got out of it, the future of this country is assured. The Bolshevik doctrine will make no headway against an army of millions of gardeners and millions of home owners.

Pennsylvania's Road Program Is Immense

Approximately 35,000 men will be employed during the present year in road building in Pennsylvania. According to the state department, 600 miles of roads will be built. It is estimated that within the next two months contractors will have to go to the labor market and employ at least 10,000 additional men. Approximately \$100,000,000 will be spent in road building in that state in the next four years.

Club Plans to Take Time by Propeller

Members of the East Aurora (N. Y.) Country club believe in taking time by the forelock. At their next meeting they will take up the matter of providing landing space for airplanes on the club grounds. It is probable one of four long fairways included in the golf course will be used for the purpose. Some members of the club, it is understood, are planning to buy airplanes and have asked the club to consider plans for making it possible to alight on the club grounds.

COW CREEK ROAD STILL IMPASSABLE

Lewis I. Thompson Returns From
Automobile Trip Through
Southern California.

It will be the first of June before motorists can travel all the way from Portland to San Francisco by automobile, according to Lewis Irvine Thompson, Portland architect, who returned recently from combined business and pleasure trip to the Mexican line in a Hudson super-six. He shipped the car to the Bay City and drove the rest of the distance.

At the present time the roads through Cow Creek canyon and the stretch between Redding and Dunsmuir are impassable. New grades were partially completed last fall in these sections and the rains and storms of the past winter have caused slides which have completely blocked traffic for several weeks to come.

The knowledge of this condition prevented Mr. Thompson from making the entire trip by motor. As it was he traveled 900 miles while in the southern part of California and, after having completed his travels, shipped his car back to Portland.

The trip was highly enjoyable, although he experienced some very rough traveling, especially along the Half Moon Bay roadway, where he states the road is more dangerous than in almost any part of the United States. Mr. Thompson drove across the continent and back a year ago and says it is worse than any he had ever seen. The particular stretch he describes ran along cliffs, and was extremely steep and narrow, and to a driver not used to the experience it seemed that the great distances below invited disaster at every point.

Mr. Thompson was particularly pleased over the power of his car, which enabled him to pass any other car on the California roads, and many of these were high powered and expensive models, whose owners attempted to overtake him without success.

Mr. Thompson arrived at Oakland at the time of the automobile show, and the Hudson dealers at this city tried to induce him to display his car at the exhibition, but he declined, owing to limited time. The drive from Los Angeles to San Francisco, on the return was made in one day. His gasoline records for the trip showed that the Hudson had made an approximate average of 20 miles to the gallon.

Mr. Thompson says that the wonderful showing made by the Hudson in the recent Santa Monica races, in which the steady performance and the reliability in comparison with the stunt cars were a noticeable feature, has made an impression that will not soon be forgotten.

English Race Track To Be Used by Autos

Advices from England indicate that the famous Brooklands race track, which during the war was permitted to deteriorate into a condition unsafe for high speeds, is to be repaired. The Society of Motor Manufacturers and Traders will assist the Brooklands Automobile Racing club in restoring the famous speedway to its former excellent condition, preparatory to the revival of racing in England. The track, which is of concrete construction, for some time held many of the world's automobile speed records, until new ones were set by De Sionville and Chevrolet in the American speedway races of 1917 and 1918. It is noteworthy that the new world's speed records were established on Goddard cord tires of the straight side type, whereas the English records were made on tires of the clincher type. Racers have come to appreciate the additional speed and the greater degree of freedom from trouble that straight side tires permit. All of the important American racing drivers are now using this type of tire.

Stiff Brush and Oil Make Best Cleanser

The proper method of cleaning small parts, such as the chassis, such as oil holes on the cross shafts of the brakes, the brake connections, clutch connections, spark and throttle connections, etc., is to employ an oil can filled with kerosene and a good stiff brush. By means of the can the kerosene can be directed to any desired place, and after the right amount of oil has been squirted on to cut the dirt, the stiff brush will remove the debris. Particularly efficacious is this method in cleaning oil holes that are partly clogged with dirt.

Hint From the Railway

The locomotive engineer frequently uses his hand to determine lubrication failure, and this is a hint that the car owner can put to good use. Failure of lubrication permits excessive friction and friction generates heat. Any part which is discovered to be too hot in the hand held near it is probably suffering from faulty lubrication.

Northwestern Will Open Auto Insurance Office in Portland

Automobile owners and dealers of
Portland and Oregon will be interested in the announcement that the Northwestern Mutual Fire association has just completed plans for opening its automobile insurance department, with headquarters for Oregon in this city.

The Northwestern Mutual Fire association in less than two decades has developed until it now is credited with writing more fire insurance than any other mutual company in America. For several years it has written more fire insurance than any other concern in Washington, and has developed a volume of business in other western states that places it in the \$1,000,000 class.

Geoffrey Christian, assistant manager of the Northwestern Mutual automobile department, is now in Portland organizing the association's services. All business will be handled through the Northwestern Mutual Fire association's Oregon department office, 810 Board of Trade building, Portland, F. L. Finley manager.

Wrench Removes Rattles

It is the work of half an hour or so to take a set of wrenches and go over the nuts that are to be found on lamp brackets, supports, tire carrier, fenders, hood and similar parts. This will remove 50 to 90 per cent of the rattles and squeaks.

TIRES

SPECIAL — Century Plainfield,
6000 Miles, All Firsts

	Reg.	Our
	Price	Price

30x3 Rib Tread	\$21.25	\$15.75
30x3 1/2 Non-Skid.	26.95	19.50
32x3 1/2 Non-Skid.	32.90	24.50
32x4 Non-Skid.	46.00	33.00
34x4 Non-Skid.	46.50	33.50
35x4 1/2 Non-Skid.	62.00	46.00

Special Bargains in Ford Sizes, All Firsts, Fully Guaranteed

30x3	
Vitalite, Plain	\$13.50
Kayote, Non-Skid	15.25
McGraw, Plain	11.80
McGraw, Non-Skid	12.75
Kelly Springfield	17.30
Kelly Springfield, Non-Skid.	20.80
New McGraw, Rib	12.75

30x3 1/2	
Fisk, Plain	\$14.95
Superbar, Non-Skid	15.45
Firestone, Plain	15.25
Willow, Non-Skid	15.45
Kelly Springfield, Plain	20.85
Kelly Springfield, Non-Skid.	26.00
New McGraw, Non-Skid.	17.50

Bargains in other makes and sizes in proportion.

Bring in your old tires and get a liberal discount on a Savage or Kokomo tire. Full guarantee. We carry all the old sizes.

Dealers, write for prices

Portland Tire Co.
881 BURNSIDE STREET
Portland, Oregon

FEDERAL TIRES

Cord and Fabric
WHOLESALE
AND RETAIL

Oregon Vulcanizing Co.

333-335 Burnside St.
Phone Broadway 379

PNEUMATICS WILL SPEED FIRE TRUCKS

Total Amount of Apparatus Re-
quired Will Be Less Because
Travel Area Will Be Greater.

That the development of pneumatic tires to the point where they are able to carry loads of several tons will result ultimately in reducing to a considerable degree the cost of rent in the fire departments of large cities appears now to be a likelihood.

In the past it has been necessary for a fire department to have stations in

many parts of a city that there may be a prompt appearance of apparatus at an alarm. When apparatus was drawn by horses the distance between stations had to be very short. The advent of motor propelled apparatus running on solid tires permitted the widening of the spaces between stations and made a reduction in the number of stations needed.

The perfecting of the big pneumatics of the United States Tire company has so enlarged the area in which an engine or truck may respond in a hurry, that use of these tires makes a substantial reduction in the number of stations very probable.

Tests by the United States Tire company show not only that a much greater speed is possible on the large pneumatics than on solids, but also that there is a saving of at least a quarter on gasoline and a half on depreciation. Besides this, the sturdy non-skid "nubs" on the United States Nobby Corda make for greater safety for the firemen on slippery pavements and bad turns.

ABSOLUTELY!

the biggest motor car value in a
light six-cylinder motor car today
is the

SCRIPPS- BOOTH SIX

More completely appointed—more
powerful—more economical than
cars costing hundreds of dollars
more.

44 H. P. Valve-in-Head Motor
Real Leather Upholstery

Owners are covering 22 miles to gallon of
gas, 900 miles to gallon of oil.
Don't fail to consider the Scripps-Booth

EVERY OWNER—
EVERY DRIVER—
EVERY PERSON WHO
RIDES IN A

CASE SIX

IS A BOOSTER FOR
THIS WONDERFUL CAR

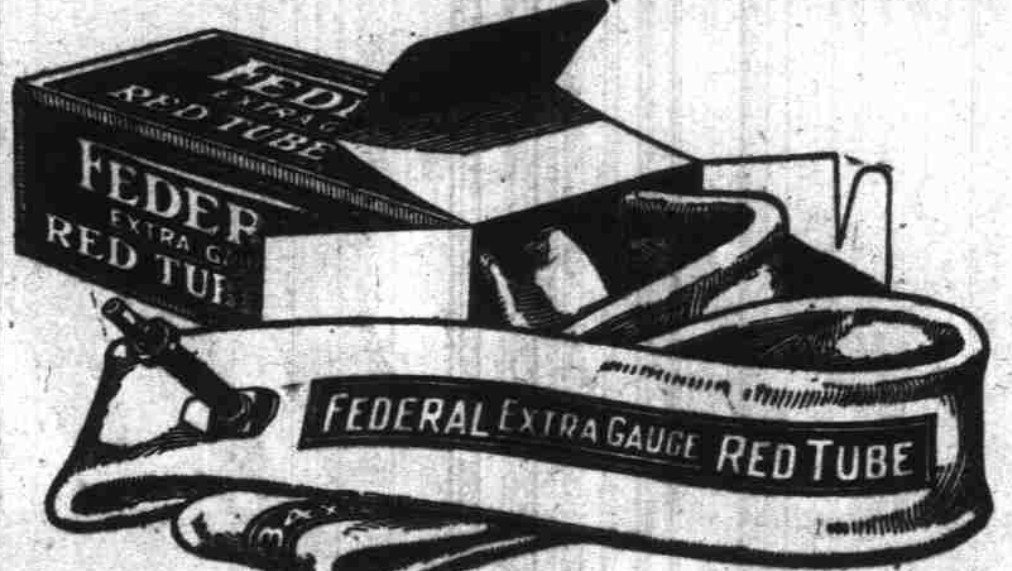
Backed by 77 years of successful
manufacturing Experience.

We are filling orders for Case Sixes in rotation
as the cars are shipped from the factory.

J. H. GRAHAM
"The man who put Service in
TENTH AT STARK"

DISTRIBUTORS ALSO OF
DENBY TRUCKS
Some Territory Open on Case and
Denby Trucks

FEDERAL "Extra Gauge" Red Tube



Extra Thick—Unusually Strong Particularly Adapted for Oversize Casings

Too light a tube, even
though of good stock,
naturally cannot be as
strong and durable as a tube
of equal quality but of "Ex-
tra Gauge," or heavier stock.

The FEDERAL "EX-
TRA GAUGE" RED
TUBE is of exceptional
quality and extra thickness,
and which, by its unusual
serviceability, is particularly

adapted for Cord and other
oversize casings.

It is made from extra fine
quality pure rubber, built
up layer upon layer, thus
making the tube exception-
ally strong and impervious
to leakage. The high qual-
ity of the rubber used in its
construction renders it very
resilient.

The Federal Rubber Co. of Illinois, Factory, Cudahy, Wis.
OREGON VULCANIZING CO.,
333-335 Burnside St.
Phone Broadway 379

Michigan in Third Place in Licenses

Michigan is in third place in a table
of amounts paid in 1918 for automobile
license fees. The total for that state
is \$2,876,256.32. The total for the entire
country is \$44,494,252.35. New York paid
more money for tags than any other
state, the license fees collected by Sec-
retary of State Hugo of New York
amounting to \$4,897,228.00. California
ranks second, with receipts totaling \$3-
536,072.88. The smallest amounts were
collected in Mississippi and Nevada, with
\$22,584 and \$21,809.76, respectively.

When you know you are going out into
the rain, rub a film of oil on nicked
parts. This will prevent rust from
creeping under the plating.

Rub Oil On, Avoid Rust

Many departments throughout the
country are making careful tests of the
nobby cords, and their reports are uni-
formly commendatory.

Tests by the United States Tire com-
pany show not only that a much great-
er speed is possible on the large pneu-
matics than on solids, but also that
there is a saving of at least a quarter
on gasoline and a half on depreciation.

Besides this, the sturdy non-skid
"nubs" on the United States Nobby
Corda make for greater safety for the
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I'll Sell You at Half!

THIS announcement is addressed to the man or company
who is considering the purchase of a truck selling at
from \$1900 to \$2800.

We offer you the same load capacity; approximately 26%
more power; 25% to 50% more of it delivered to the wheels;
5-inch pressed steel channel frame; the famous Hotchkiss
drive; wheelbase of 130 inches; loading space of 114 inches
and every high-grade truck feature you desire—at \$1995!

Further than merely selling you at half, let me figure out
the saving per trip, per day, per month, per year and per ton-
mile that the All-American will effect in your hauling—your
own particular problem!

Let curiosity tempt you to "find out what he's got" and
telephone me today.

Phone Us and Our Truck Man Will Call On You

BROADWAY AT OAK
E. First and E. Morrison
Broadway 515, A-3343

Mitchell ALL-AMERICAN

Phone Us and Our Truck Man Will Call On You

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