

CAR MAKERS WANT BETTER QUALITY GAS

But That Means Higher Prices,
So They're in Quandary.

GRADE OF FUEL DECLINES

Due to Lowering in Quality, Manu-
facturers Have to Make Costly
Engine Experiments.

DETROIT, Aug. 16.—Detroit automobile manufacturers are faced with the alternative of asking gasoline producers to fix a certain limitation on the quality of automobile fuel, which means a curtailment of production, and increase in price, or accept such grades of gasoline as are offered and continue the costly experiments in engine design necessary to meet the steadily decreasing quality of the fuel.

Representatives of the Detroit automobile manufacturing plants composing the Automotive Fuel club gathered for a lengthy discussion of this problem this week. It was decided to ascertain how long the present grades of gasoline would be on the market and what changes are likely to be made in the next year or two before formulating any definite policy.

Figures submitted showed that in

SHIFT YOUR TIRES.

When your rear wheels revolve the traction on the road has a tendency to stretch tread, fabric and side walls in exactly the opposite direction.

When your front wheels revolve the traction of the road has directly opposite effect as produced by traction on tires on rear wheels, for the tread, fabric and side walls are stretched in the same direction the wheel revolves.

Remember this when shifting tires: Always place a rear tire on the opposite wheel so that it will revolve in exactly the same direction. The reason for doing this is that if you placed a rear right tire on the rear left wheel, and in doing so turned the tire completely around, the traction of the road would start stretching the tread, fabric and side walls in the opposite direction from which they had been stretched, and you would soon have loose tread, weakened fabric and general deterioration.

the last three years gasoline for motor fuel has decreased in gravity from 60.5 to 55 and the end point has increased from 300 to 400 degrees Fahrenheit. During the three years one factory alone had received seven different grades of gasoline. Reports from oil companies gave the impression that the low grade of gasoline marketed is due to the fact that less of it is being obtained from crude oil and consequently more blending with kerosene is necessary.

Dealers Clamor for Cars.

Visiting dealers and distributors from all over the United States are besieging Detroit automobile makers to fill out their allotments as rapidly as possible. Most of these are bringing in new orders also and it would seem that the volume of new business offered is in the ratio of about two orders to one available or near available car. It is said the Dodge plant is swamped with new business and that the production department is staying up nights devising ways and means to still the clamor of the buying public.

Maxwell-Chalmers interests are behind more than 25,000 cars on order for this year and the Maxwell company is 27,000 cars behind. The present production of Maxwell cars is 300 daily, and Chalmers 200. A progress schedule of 50,000 cars in all. The Maxwell company plans to manufacture 100,000 cars during the year which began July 1. It is understood the company had \$10,000,000 coming from the government.

Indicative of the demand for automobiles which underlies the heaviest and most insistent in the history of the industry, it is said on reliable authority that the Ford motor company had orders on its books August 1 for more than 100,000 cars. It is also said that the company's production schedule for the fiscal year ending July 31 was greatly exceeded.

In addition to the avalanche of orders, from all parts of the United States, Detroit manufacturers are confronted with trying to solve the export problem. Their foreign representatives are becoming insistent and each day brings visiting buyers from across the water, cablegram orders and continental mail seeking quick deliveries. Most of the makers are sparing for time until their production once more attains its normal status.

Import Restrictions Lifted.

Recently local manufacturers were advised that virtually all restrictions against the importation of automobiles, tires and parts had been lifted by France and that the commodities could be exported from the United States to that country freely. It is expected Great Britain as a result of France's action will remove restrictions in the near future.

W. A. Crowe, Ltd., of Adelaide, Australia, has just placed an order for 100 chassis and completed cars with the Harley Motor Car company of Kalamazoo. It is the largest export order received by the company.

Production will begin at the new plant of the Cleveland Automobile company, now being rushed to completion, within a few days. The company has orders booked for 22,000 cars to sell at \$1350.

The White Motor company of Cleveland, makers of the White truck, is contemplating expansion of its plant which will greatly increase the output.

Three great factors in increased production of Oldsmobiles and Olds trucks will be ready for operation by winter. These units, started in the spring, mean when completed an expenditure of \$2,500,000, of which \$1,500,000 is the cost of the buildings and \$1,000,000 represents equipment.

Plans for further additions are being worked out by the General Motors for the Olds plant. The original Olds factory is completely overshadowed and surrounded by the new structures. The daily production of the Oldsmobile organization has reached 200 vehicles, including both passenger cars and Economy trucks.

Squeaky Springs.

In cases of chronically squeaky springs, try jacking up the car so that the weight is removed from the springs and then soaking these latter with kerosene. Run the car for a day or so to let the kerosene soak in and then saturate the springs with some of the old oil that has been drained off from the crankcase. After a day's run wipe off any excess oil that shows to prevent the collection of unseemly dust.



The Scissors Test
Take test strip 1/4 in. by 3 in. Stretch to 9 in. or three times its original length. Cut on the edge with scissors. The cut should not be more than 1/8 in. across the sample. If the strip tears apart the rubber is inferior.

AT EVERY STEP YOU'RE SURE

WITH a pair of scissors today, you prove that Norwalk Tubes do not rip when cut or blown out. With the Norwalk Tube itself you realize the significance of floating stock. Greater safety because of greater strength.

And then you will ask for a Norwalk Casing—either a fabric non-skid or a cord. Both have black tread and snow white side walls.

If your local dealer cannot supply you write to

Auto Parts Supply Co. Portland, Or.
Auto Parts Supply Co.
312 E. Pike St., Seattle, Wash.

Distributors

NORWALK TIRE & RUBBER COMPANY
NORWALK, CONNECTICUT

"Floating stock is the standard of rubber quality. It is rubber so pure that it floats. In a tube it means mileage. You are going to learn a lot more about Norwalk quality. But don't wait. Start saving your mileage-money now. Get the stuff that's in the tube. Ask us for a sample of Norwalk rubber."

Stretched, as in the tire, good tubes do not rip when cut. They cut but do not rip.

NORWALK TUBES and CASINGS

POINTERS ON SOLID TIRES

WEARING 'EM DOWN TOO THIN
BAD FOR TRUCK.

Owner Who Tries to Economize on
Tires Used Too Long Pays for
It in Truck Depreciation.

"If your truck could talk in language understood by the average man," said Seth Leavens of Leavens & Howard, Goodrich solid tire distributors here, "it would make you think of the days when parental government was more severe than it is today. Intense shakings (vibration) were a punishment to the boy for wrong doing. When truck tires do not properly cushion the load the effect is similar to the incident of the small boy being shaken, but much more expensive."

"Vibration causes more repair bills than anything else unless it be lack of lubrication. When tires get low, repair bills climb high and depreciation on the truck grows rapidly."

"There can be no more saving in running a truck with thin rubber tires than in running a touring car without tires, or with flat tires."

"Heavy loads make cushioning a necessity if any speed is desired. Crystallization of axles, bearings, drive shaft and crank shaft proceed rapidly when the cushion effect is lost in old tires. Very frequently axles and drive shafts break or bearings and gears wear out while the owner curses his luck or the truck, when all that was necessary to keep the truck moving continuously might have been a little attention in keeping parts tight and good rubber on the wheels."

"Many trucks are turned in on new ones each year because the owners think they are either ready for the scrap heap or a good-sized overhaul. It is very possible that good rubber would have delayed such a condition at least a full season. A new set of tires will make such a marked im-

provement in the running of a truck that it is really hard to account for so many owners trying to get another month or six weeks out of tires that have long passed their stage of usefulness or profitability."

"Good thick tires cause a noticeable saving in gasoline and help to return to the owner a large part of the cost on those two items alone. Of course, it naturally follows that the more good live rubber, up to a certain limit, the manufacturer puts into his tires the better it is for the truck owner."

"Some tire makers turn out two heights of tire to meet the condition of the purchaser's pocketbook or state of mind, but the small difference in price invariably makes for better value in the higher type."

**Looks as if Overland Were
Preparing Surprise.**

Something Brewing for Public, Judging From Conference of Executives and Coming Dealers' Convention.

OVERLAND dealers in Oregon, of whom there are 65, have been summoned to a conference in Portland on September 1, with H. H. Eling, manager of the Willys-Overland Pacific branch here. There is persistent talk that this conference will be of a good deal more importance than the usual annual meeting.

For sometime there has been circulating in automobile trade circles gossip to the effect that the Willys-Overland company is just about ready to spring on dealers and public what will be the biggest automobile surprise of the year. It's significant that no announcement has as yet been made as to the 1920 models of Overland and Willys-Knight cars.

The fact that every executive of the Portland branch has recently been at the Overland factory at Toledo, O., in response to imperative summons from the factory, lends pretty strong evidence that something is brewing. And now comes the state conference with Manager Eling, shortly after his return.

What is it? Don't ask Mr. Eling. He only smiles and says nothing. But there's something in the wind.

ORIGIN OF AUTO NAMES

SEDAN COMES FROM OLD PORT-
ABLE CLOSED CHAIR.

Limousine Was Formerly Name of
Cloak, and Roadster First Ap-
plied to Tide Vessels.

The derivation of the various names by which the popular types of motor car are known is interesting. Coupe, sedan, limousine, touring car, roadster are the names by which the five chief types of cars are known and both the French and English language contributed to their naming.

The word coupe was originally applied to closed carriage for two persons. It is derived from the French word meaning "to cut" and was so called because it gave the appearance of a larger carriage cut in half.

The word sedan is probably one of the oldest words applied to a vehicle for transportation. Sedans were at first portable closed chairs carried on two poles and they derived their name from the fact that they were first used in the French city of Sedan.

Limousine was originally the name of a cloak worn in France and probably the name originated from the old province of Limousin in central France. Just how it later came to be applied to the modern chauffeur-driven car is not quite clear.

Roadster was first applied to vessels that worked their way by means of sails. Later it was applied to bicycles and more recently to two-passenger open cars.

The touring car takes its name from the fact that it was the vehicle most frequently employed in long-distance trips. The dozen of owners of closed cars use them for all their journeys and they seem to be growing decidedly in popular favor for all classes of usage.

Sound the horn when approaching a turn in the road or the brow of a hill, for another car may be coming toward you.

Swinehart Tires

This Man Knows Why
They Wear
-and Wear
-and Wear

MOST DEALERS

are familiar with the care, time, materials and workmanship that go into the making of Swinehart Tires. And, after all, these are the essentials—the principal ones—necessary in making good tires.



We Make Them So

There is such a thing as a good tire. One that is made to stand up and go through with the worst that comes.

And it's the only kind worth having; the kind you can believe in.

Most men in the tire business think Swinehart Tires are that kind.

At any rate, we try to make them so.

One thing we DO know:

It's the tire without a single Government rejection.

Swinehart Tires are made in both Fabric and Cord—both give more guaranteed mileage for your money than you ever would expect or ever have a right to expect.

Ideal Cellular Truck Tires

The angle, depth and width of the cells or holes in this remarkable tire are scientifically correct. This patented construction makes this tire semi-pneumatic and eliminates the dangers due to blowouts and punctures, so common in pneumatic truck tires. No spare tire is necessary, because the tire will often outwear the truck. This cellular feature also makes the tire anti-skid and non-heating. The many advantages are obvious. Let your next tires be Swinehart—and see that the truck or car you buy is equipped with them.

Dealers: There may be an opening for a dealer in your territory. Better inquire now.

General Agents for Northwest
GENERAL SALES CORPORATION,
718 Mission St., San Francisco.
HARRY C. GLEASON, 1010 No. 47th Street, Seattle.

AGENTS:

C. M. Harrison Company, 328 Pine Street, Portland
Rochester Motors Company, 1012 Sprague Ave., Spokane
Victory Tire Company, 312 Second Ave. South, Seattle
Victory Tire Company, 722 Commerce Street, Tacoma

All of the above agencies are equipped with pneumatic presses and give complete service on Swinehart Tires, both Solid and Pneumatic.

FISK TIRES ARE RETAILED

PORTLAND TIRE COMPANY
TAKES AGENCY HERE.

To Provide Needed Space Increase,
Firm Removes to Much
Larger Quarters.

The Portland Tire company, of which George Whalley is president and manager, has removed to larger quarters at Sixth and Burnside streets. It now occupies the entire space formerly used by the Auto Electric Equipment company, Frost-o-lite battery dealers. Business has been pretty good with Mr. Whalley. He carries all standard lines of tires, but since the Fisk Rubber company a month ago instituted its new policy of selling tires at wholesale only, he has taken over the retail

agency for that well-known tire in Portland. He also handles the Savage tire agency here.

In his new quarters he occupies both the first floor and the basement, where a big stock of tires is stored.

Bearing Trouble.
The average car owner does not real-

ize how slight a bump may have a disastrous effect on the car's mechanism. The writer recently found a case where a comparatively slight bump against the curb bent a rear axle shaft, and this in turn caused excessive wear of the inner face of the right and roller bearing, so that the entire bearing had to be replaced.

"Lee Line Way Makes Motor Trucks Pay"

Overloading Motor Trucks Is Costly

Every time that a motor truck carries an excessive overload the strain on the machine shortens its life and eventually will result in a loss greater than the temporary gain. Motor trucks will pull more than they will carry. Men who study motor transportation load trucks to capacity and carry an additional load equal or greater on trailers. Lee trailers offer motor truck owners the opportunity to eliminate overloading and to double their facilities for transporting merchandise, produce or material at an increased operating cost of 10 per cent. Lee trailers are built in capacities to meet any requirement and will wear indefinitely. Other units of the Lee Line are pole trailers for logging, various types of dump bodies and loaders—all constructed to save time and money.

We should like to submit proof of their value to any motor truck dealer or operator.

WILLIAM L. HUGHSON COMPANY
60 N. Broadway at Davis Broadway 321

San Francisco, Oakland, Los Angeles, San Diego, Seattle, Portland
The Oldest Motor Car Organization on the Pacific Coast.



NO, THIS IS NOT THE PROW OF A BATTLESHIP, BUT ONLY THE
BOW OF A KLEIBER 2-TON TRUCK.



The Kleiber only recently has come to Portland, being handled here by the State Auto Sales company. J. H. Almsough, of the Kelly Tire Sales company and also president of the new truck company, is steering the truck.

DIAMOND T

WORM DRIVEN Motor Trucks

Now at

89-91 NINTH ST. NORTH, NEAR FLANDERS

Diamond T Truck Sales Agency, Inc.

Phone Broadway 476