

Highway and Auto Dope

Traffic and Tourist News

AUTOMOBILE NEWS

MODERN CAR IS MARVEL OF ENGINEERING

Individual Units Perform Mile After Mile Under High Speed and Even Abuse.

Automobiles have gradually attained so high a general average of mechanical excellence that the motoring public of today gives comparatively little thought to the advanced engineering that has made possible this standard of perfection.

and treated it with the respect and consideration that is due a fine mechanism.

But familiarity has bred contempt. The engineer now has to build cars that will function reliably when constantly abused, instead of being pampered.

Automobile is a Marvel
The ordinary performance of an automobile—actually in a marvelous demonstration of modern engineering, a striking example of the correct coordination of nearly all the known physical forces and principles of mechanics.

Only recently a stock car covered 1999 miles in 489 minutes on the Culver City track. Although it was the fastest thousand miles ever traveled by man, except by air, the record was calmly accepted by the public as just one more step in automobile progress.

The car averaged one mile every 41 seconds for 11 1/2 hours. That will impress anyone, but figure out the performance of some of the individual units of the car, and you may get a better idea of just what this record means.

2640 H. P. M. for 11 1/2 Hours
The total number of revolutions of the motor for 1999 miles was

OBSERVER MAN IS TO PARTICIPATE IN DEMONSTRATION

A novel trans-continental demonstration with the new Willys-Knight six as the principle figure will start from Boston, Monday of next week. The stunt is being staged to show the stamina and endurance of the Willys-Knight as well as its economy of operation.

The car will be driven entirely by newspaper men from Boston, Massachusetts to Portland, Oregon. Each driver will take the car in relays and the machine will be passed along from city to city.

Harvey P. Matthews, business manager of the Observer has consented to act as driver of the machine from La Grande to Pendleton. G. G. Gittings and Hank who received a wire direct from the factory Thursday saying that the trip will be started have no details other than those given in the telegram and so are unable to state just when the Willys will get here but expect it about the latter part of next week.

State Cops Have Much Territory to Cover Now

(By J. S. L.)
The calling in of the county speed cops and placing the entire Oregon highway system under the jurisdiction of the state officials is regarded by many of the local traffic men as an indication that the speed limit on the highways will in time be raised above the present 20 mile restriction. How soon or whether this will actually come about is a matter of conjecture.

One thing is certain and that is that under the present system the likelihood of being arrested for driving faster than the limit is considerably lessened. With but 24 policemen covering the entire state the rapid drivers will certainly have a much better chance of getting away with it from now on.

Before the change Union county employed two traffic men during the summer months and Multnomah county always had one on the payroll and at times two. Besides these the state men were constantly coming into the territory.

Under the new arrangement, Alonzo G. Dunn, former traffic officer of La Grande will have both counties to take care of by himself. Other parts of the state will be policed accordingly. Mr. Dunn is a very able man, but it seems likely to be difficult to get more than a small percentage of the speeders.

Although the weather is usually considered the personal property of the farmers whose fortunes

Kills Bumps



This man, Alden L. Putnam, inventor of the balloon tire, may be the center of an extensive patent litigation in the next few months. He hurried to Lansing, Michigan from the west last week to assist the Motor Wheel Corporation in defense of the right to collect royalties for the invention.

Be careful, vigilant, courteous, thoughtful.

POLICE AUCTION OLD AUTOMOBILES AT LOW PRICES

LOS ANGELES (AP)—Automobiles were purchased for from \$2 to \$4 and motorcycles for 50 cents at a sale held here recently by the Los Angeles Police Department in disposing of unclaimed machines. The lowest price paid was 25 cents for a battered chassis of a popular make of car, while the high mark was reached when an anxious motorist bid \$10.50 for an antique motor-driven conveyance that was guaranteed to run.

In all, 29 cars were sold, a majority of which were of ancient model and some with romantic records. They brought in a total of \$55.62. The lowest price paid for a complete automobile was \$1. Motorcycles were sold at prices ranging from 50 cents to \$2.

Buyers were obliged to move the cars from the stockade and police department officials say most of them left at the end of two ropes.

DODGE BROS. MOTOR CARS

Prices f. o. b. La Grande

TOURING	\$1065
ROADSTER	\$1025
COUPE	\$1190
SEDAN	\$1315
COACH	\$1315

Smith's Garage

Look at your tires!

That tire on the right rear wheel—or maybe it's the left. It's getting rather worn—better shift it up in front and put a VIKING in its place. That's the safest and cheapest way.

VIKINGS are sturdy, tough, resilient—made for hard going, for lots of road-coverage. They're guaranteed.

"Viking Tires Will Do You Many a Good Turn"

SNYDER & MCKENNON
1306 Adams Ave.

1,532,000. Reducing this to revolutions per second, the engine turned over 44 times per second, over a period of 11 hours and 29 minutes.

With every two revolutions of the engine there was an explosion of gas in each cylinder. To explode these charges each spark plug fired 916 times per mile—1329 times a minute; that is, 23 times a second, or a total of 916,500 sparks for each plug.

Considering six cylinders and six spark plugs, this means that the battery and distributor had to supply 5,499,000 electric impulses, at 132 sparks per second.

Piston Travel—1734 Miles
The stroke of the motor was 5 inches. With each revolution of the crankshaft, each piston traveled 10 inches, a total of 2217 feet per minute, or 289 miles per piston for the entire 1999 mile run. Taking the six pistons into consideration, this means a total piston travel of 1734 miles.

For the pistons to cover this distance in their closely fitted cylinders required positive lubrication. The gears of the oil pump had to supply a constant flow of oil, and the oil had to remain cool. The gears revolved 1,929,800 times in the 1999 miles and had constantly to maintain close contact so that there should be no decrease in the flow of oil to the cylinders and bearings.

The fan of the automobile receives but little thought, ordinarily. Yet consider the work it performs and the load it withstands. Throughout the Culver City run, the car's fan revolved at an average speed of 56 revolutions per second, or a total of 2,322,150 revolutions in 11 1/2 hours.

The entire distance was completed without a change of tires. While 1999 miles is a small proportion of the average life of a tire in ordinary use, when you reduce this to revolutions the figures are astounding.

Tremendous Task of Wheels
The rear wheels of the car, with their 22 inch tires, turned 611 times per mile, or a total of 611,000. This means that the wheels and tires stood up perfectly for 11 1/2 hours, while bearing the load of the car, driving it forward, and turning at the rate of 855 times each minute—14 times each second.

Many people have pondered over the old question, whether the top of a wagon wheel moves faster than the bottom of the wheel. Some light may be shed on this problem by the fact that while the car travelled 1999 miles, a point on the tread of the tire actually travelled 1270 miles. The reason for its greater travel is, of course, that besides moving forward, this point on the tread of the tire also rose 23 inches and descended 23 inches with each revolution. The point on the tire of a rolling wheel actually travels four times the diameter of the wheel with each revolution.

But do a little figuring of your own and you will gain increased respect for the automobile.

The car weighed 2999 pounds—its 1999 miles was equivalent to a day's work of a fleet of how many loaded 5-ton trucks operating at 10 miles an hour.

The piston displacement of the car was 229 cubic inches. How many cubic feet of air did it take in during its 1,532,000 revolutions? Each piston made 2,566,000 strokes of 5 inches each, a total of 2217 feet per minute; bearing in mind that the piston is at a standstill at the top and bottom of each stroke, what was the maximum speed during each stroke and how fast did the piston accelerate to reach that speed?

OLD CAR USED
HOLLYWOOD, "WH. — Norma Talmadge in "The Lady," new photoplay now being shown throughout the country, appears with the 1904 Franklin which over 29 years ago established a trans-continental record from San Francisco to New York City.

The pioneer Franklin which was built after the fashion of the horse-drawn "traps" then in vogue, has nevertheless many of the features of modern motor cars: with a little tuning up, it performed so surprisingly well that Everett Frank, through the United Studio grounds and then detoured through the business section of Hollywood, much to the amusement and entertainment of observers.

Because of the historical achievements of this Franklin, it is kept as a prized relic by the Franklin dealer of Los Angeles.

SPEEDERS AND HIT AND RUN DRIVERS BEWARE!

2000 CITIZENS REPORTING EAST BAY SAFETY COUNCIL

In Oakland, California, the business of nabbing speeders and hit-and-run drivers has assumed big business proportions, with huge signs warning motorists and some 2,000 citizens sworn to jot down numbers of offenders.

BIG VOLUME PREDICTED

High automotive production will continue well through the second half of 1925 it is expected by R. H. Grant, sales manager of the Chevrolet Motor company, who has spent three months of the current year visiting in direct contact with Chevrolet dealers. His travels have taken him to most of the large cities and more than half the states.

"Demand for cars, which even before this time last year was beginning to slacken, will remain strong," said Mr. Grant. "The sales peaks and depressions of former years are beginning to flatten out. The automobile has become a year-round product, particularly since the closed car grew to such favor. Seasonable variations in demand are becoming less marked.

"No one section predominates as a present or prospective market for automobiles. Sales throughout the entire country reveal a refreshing steadiness and uniformity of demand. And improvement of the agricultural situation, particularly in the southwest where the drought has broken, indicates that thousands of farmer-purchasers will help sustain the demand during the latter part of the year.

"It is not improbable that demand will increase slightly in the near future and then remain unchanged for some time, still at a comparatively high level. This possibility, however, will have slight effect upon production, especially among the large companies.

"Production of the more popular cars during recent months has been unusual to demand with the result that manufacturers have been accumulating a reserve of unfilled orders which they can meet only by steadily building automobiles. This is a favorable and healthy condition for any business. It is a guarantee against abrupt production variations. Also, it benefits the dealers because immediate delivery of cars to waiting purchasers permits a rapid turnover of capital.

"The race of the Chevrolet unfilled order list against recent record production strides appears well for future sales. Chevrolet went into May with 25,482 unfilled orders. In spite of a large production schedule the amount of reserve orders was diminished but slightly, due to the number of new orders received."

The Hudson Coach At \$1475

The Essex Coach At \$1015

These are delivered prices

THE CARAVAN will show you why HUDSON - ESSEX is "The World's Greatest Buy"

Ledbetter's Garage

USED CARS

1924 TUDOR SEDAN Like New Price \$575
Has Double Haslers, Motormeter, Speedometer, Dash Light, Foot Accelerator; guaranteed A-1 mechanical condition.

1924 Ford Touring Almost New Price \$375
Has S-M Spotlight, Good Tires; newly painted, and carries a 30-Day Mechanical Guarantee.

1923 Roadster Price \$335
Just completely overhauled, new parts throughout the engine, transmission re-lined, generator overhauled and thoroughly re-conditioned. This car has Motormeter, Windshield Wiper, Fender Braces, Cut-out, Foot Accelerator; 30-Day Mechanical Guarantee.

1924 1-Ton Ford Truck Price \$350
New Rear End. Engine completely overhauled. Good Tires. This truck is in A-1 condition; 30-Day Guarantee.

1924 Touring License \$315
Newly painted, Re-conditioned and Guaranteed for 30 days. This is an exceptionally good bargain.

Perkins Motor Company
PHONE M-500. Corner 4th and Adams

Rebuilding an Automobile Motor Is A Job For Experts

The difference between a new engine that runs smoothly and economically with maximum power, and an old engine that does the opposite is chiefly a question of worn parts and machine adjustments.

Your motor may need rebuilding due to thousands of miles it has run or due to lack of care and abundance of abuse over a short period. No matter what the cause, when the rebuilding is done your motor should run and wear like new.

That kind of a job is not for amateurs or "fixing" mechanics. It's a job for experts. Thorough knowledge of parts and fine machine adjustments are things we pride ourselves on here. You take no chances. Our work is guaranteed. Be sure you get the satisfaction of a "Leighton Job."

Leighton's Welding & Machine Works
Block Re-grinding - Engine Re-building - Bearings - Pistons - Parts
Fine Machine Work

Studebaker Quality

ABOUNDS THROUGHOUT IN THIS

New Coach

at **\$1545**

Delivered In La Grande

No equal value can be found in the industry for this beautiful closed model selling at open car price.

The body is Studebaker built, the motor is the famous Standard Six Studebaker, and the running economy and riding comfort is the same that has made the demand for Studebakers so tremendous.

Of course the demand for the Studebaker Coach is large—so we urge that you place an early order.

M. J. GOSS

Studebaker Sales and Service.

"This Is A Studebaker Year"