

SEVENTY-FIFTH YEAR

SALEM, OREGON, SUNDAY MORNING, SEPTEMBER 20, 1925

TEST DRIVE SHOWS MERITS OF KNIGHT

Demonstration With Willys-Knight Made Under Average Conditions

A Willys-Knight sedan can be driven to Yosemite and back in one day and the motor will not overheat. This was the result of a test to determine what the average motor car owner may expect from his car, completed last Friday by the Willys-Overland Pacific company, using a Willys-Knight sedan which had been driven in excess of 8,000 miles in company service before the run and which was in no manner doctored or conditioned for the trip.

The car was driven by Fred Lawton, lecturer on the Willys-Knight motor, and accompanying him were a factory sales official and a representative of a San Francisco newspaper.

The start was made from the Hotel Oakland at 4:14 a. m. and the run was finished at 9:23 p. m. of the same day.

The route followed to the park was over the Wawona grade, with a stop at the Wawona big trees and the return was over the Big Oak Flat road.

Power, motor efficiency, cooling and lubrication were the four features of operation which were put to test, accurate records being of all gear changes, oil and fuel replenishment and water and oil temperatures.

To determine the water temperatures in the cooling system, a laboratory thermometer was employed, being fitted into the radiator cap in the same manner as a thermometer.

A laboratory thermometer was also fitted in the crank case, the thermometer being so constructed that it permanently recorded the highest temperature of the oil and of the water during the trip.

The cooling properties of the Willys-Knight motor were proved by the thermometer reading which reached its highest point of 208 degrees Fahrenheit at the end of 40 miles of running at the highest speed of which the car is capable. This was safely below the boiling point.

The highest point reached on grades was 206 degrees Fahrenheit, proving the contention of Willys-Knight engineers that the motor will not boil the cooling system even under the hardest driving conditions. On the five major grades of the run, temperatures of 206 degrees, 204 degrees, 201 degrees, 200 degrees and 200 degrees were recorded, showing a remarkable consistency of cooling with the highest temperature always safely below boiling.

The maximum temperature recorded on the oil was 184 degrees, or well over 150 degrees below any point dangerous to lubrication.

The total distance covered was 427 miles, of which 11.5 were made in second gear, including the climb out of Yosemite and .3 of one mile in low gear on a particularly sharp turn, the remainder of the trip being made in high.

Drivers familiar with the steep grades and sharp turns of the run to Yosemite will be quick to recognize that a motor which will

There's Efficiency In Ford Fire Department



When Firemen Are Not Answering Alarms They Work at Drill Presses Manufacturing Parts for Ford Cars.

Fighting fires is one thing, but when there aren't any fires to fight why the firemen haven't anything to do—that is, most of them.

Just about everyone knows how heavy time hangs on the hands of the "boys" around the average city fire engine station between alarms, but anyone interested in seeing something different can find it at the central fire station in the Highland Park Plant of the Ford Motor Company.

Here the picture is entirely changed. Just back of where the fire truck stands there is a row of drill presses and between alarms the firemen keep busy operating the presses in the manufacture of parts for Ford cars.

Work 8-Hour Shifts

Besides, the men work in eight-hour shifts twenty-four hours a day. There are no sleeping quarters and the men are wide awake and on the job all the time.

It is less than twenty feet from the presses to the fire truck so when an alarm comes in it is only a matter for each man to make a quick turn around and climb on the truck to transform himself from a machine operator into a fireman on the way to a fire.

Ninety men regularly employed in the Highland Park plant are on the fire department roll and this force is augmented by 200 specially trained men who may be called out at a moment's notice in case of emergency.

make the trip with only 2 1/2 per cent of the total mileage in second gear has all the power that can be expected from a car normally known as possessing big and usable power.

Oil consumption totaled five quarts while fuel mileage showed an average of better than seven miles to the gallon.

Out of the total elapsed time of seventeen hours and nine minutes thirty-six minutes were taken out for repairs to a tire, fifteen minutes were spent at the Wawona big trees and fifty minutes were taken for meals, giving an actual running time of fifteen hours, thirty-eight minutes, or a road average of better than twenty-seven miles an hour for a sedan which was standard in every detail.

The running time, the extremely low mileage in second gear, the low temperatures of water and oil, the high fuel and oil mileage, when it is considered that they

Above—Ford fire truck and crew and below, scene in fire station showing firemen working at drill presses.

How Fire Squads Work

The regular firemen work in three divisions, thirty on each eight-hour shift. Of those in each shift ten are on duty all the time in the central fire station. As soon as the first squad leaves in response to an alarm, the second squad moves in and if it is called out before the first returns there still is the third left to come into headquarters.

To provide and maintain adequate fire protection for the plant is in itself a big job. It must be remembered that

more than 50,000 men are employed at Highland Park and that the plant covers 278 acres of which 105 are under roof. There is a complete fire alarm system, with boxes located at convenient places throughout the buildings and yards and in addition to the fire truck the fire fighting equipment in the plant includes 100 forty-gallon chemical tanks mounted on wheels, 2,000 three-gallon hand extinguishers and 6 miles of hose on racks in various parts of the plant close to fire hydrants.

the value of imports from the United States was \$4,132,000. Tractors imported amounted to \$1,960,000, of which the imports from the United States amounted to \$1,936,000.

There are varieties of mosquitoes that do not drink human blood, but live exclusively on the nectar of flowers, on the sap of certain plants, and the juice of over-ripe fruits.

U. S. TRACTORS USED WIDELY BY SOVIET RUSSIA

WASHINGTON, D. C. — Statistics furnished by the Commissariat for Foreign Trade Relations to the Russian Information Bureau indicate that the United States is now supplying nearly half of the agricultural implements and machinery imported into the Soviet Union, including virtually all of the tractors. Imports of agricultural implements and machinery for the first eight months of the current fiscal year, Oct. 1 to June 1, aggregate \$9,628,000, of which

CHAMPION SPARK PLUGS WIN AGAIN

Hill Climbs and Races Are Captured by Cars Using Champions, Said

Through clean sweeps in the A. A. 250-mile race at Altoona, Pa., Labor Day, and the Italian Grand Prix at Monza, Sept. 6, together with a world's record in the Pike's Peak National Hill Climb, Champion spark plugs ran their string of victories within two years in major speed and endurance contests to 26. Perfect engine and spark plug performance, according to cables and telegrams to the Champion Spark Plug Co.

While his "boss," Tommy Milton, was leading the invading Americans to the finish at Monza, Bob McDonough, Milton's youthful protégé, was gaining the thrill of his first big victory when he ate up the 1 1/2 mile Altoona speedway at an average of 118.2 miles per hour without a single stop, in a race marked by plenty of other thrills and a blazing summer sun. He was compelled to set a new track record to win. Every car in the race was Champion equipped.

Brillipieri, the Italian, captured the Monza spectacle from a field of 22 other entries, averaging 152.7 kilometers (94.82 miles) an hour with his Alfa Romeo over the 800-kilometer (497.1 miles) course. Fourth and Fifth places were the best the American—Milton, Peter De Paolo and Peter Kreis—could secure. Milton's Duesenberg was 3-2 minutes behind the winner. De Paolo, fifth in another Alfa Romeo, was 90 seconds behind Milton. Kreis, after leading during the early stages, was eliminated by an accident. Every car that finished used Champions, which also won the Grand Prix de Boulogne, in France, capturing all three places over the 400-kilometer journey with a perfect plug performance. They likewise gained a clean sweep in the Coupe Bollot, near the same city.

Champions were also equipment in all cars in the world's record Pike's Peak Climb. Meyers, piloting a Chandler factory entry, lowered the previous mark to 17 minutes, 48.8 seconds. He reports a perfect plug performance under the most trying conditions of compressions, due to a climatic changes at the varying altitudes.

At Buffalo the same set of spark plugs won two races in one day, when Miss Palm Beach took the 100-mile International Motor Boat Sweepstakes, averaging 44.3 miles an hour, and the 50-mile free-for-all, in which the Niagara River record was broken. Frank Lockhart, with Champions, established a new dirt track record at Medford, Ore., turning its 1 1/8 mile course in 47 3/5 seconds.

CHILDREN ARE GIVEN PLAY GROUND BY JOHN N. WILLYS

TOLEDO, Ohio—A play ground in West Toledo has been donated by John N. Willys, answering the plea of residents of the neighborhood.

Willys owns considerable property in the West Toledo district, including factory sites and a railroad right-of-way.

Upon hearing of Willy's donation, Henry Ford, through Toledo officials of the Detroit, Toledo & Ironton Railroad, has made tentative arrangements to put a tractor on the field, get it in shape for play, and then furnish equipment for the children.

FILLING STATION READY FOR TRADE

Articles of Incorporation Filed; Greasing Equipment is Complete

Articles of incorporation were filed Friday by L. D. Jones, W. R. Kirkpatrick and H. S. Cheek, who are opening the new service station at the intersection of Court and Capitol. The station is one of the most attractive in the city and in the heart of the old exclusive residential district.

Four pumps have been installed while General and Standard Oil gasoline will be sold. Valvoline and Penn State oil will also be handled.

With one exception, the automatic pneumatic high pressure grease gun equipment is the only outfit of its kind outside of Portland.

Mr. Jones has located on North Fourteenth street and is placing his two sons in school this fall.

The trouble with conservation in America is that it is as yet mostly conversation.

SEE THE OREGON CAVES!

Wonderful Caverns in a Mountain of Marble
40 Miles From Grants Pass
Via the Redwood Highway

FOREIGN SALES BY STUDEBAKER LARGE

Standard and Big Six Enjoy Large Sales in Cities of Foreign Powers

More high powered motor cars were exported by Studebaker during the first six months of 1925 than by any other automobile maker in America.

In most countries, this achievement was won against the penalty of a horsepower tax, which makes ownership of cars more costly in proportion to their rated power.

In England, for example, the buyer must pay a yearly tax of one pound per rated horsepower, or about \$171 on a Studebaker Big Six, on which the power rating is 36.4. The smallest of the Studebaker cars, the Standard Six, carries a tax of \$129.

On the other hand, the tax on cars which compete with the Standard Six runs from \$81 to \$100 each, rating being from 17.3 to 23.4 horsepower.

In spite of this handicap, the demand for Studebaker cars grew during the first half of the year to such an extent that exportations exceeded those of any other American maker of highpowered cars. Many highpowered cars which enjoy significance in the American field obtained almost no foothold in the foreign market.

In much of this territory, the Studebaker Big Six enjoys a reputation similar to that which a \$12,000 English-made car enjoys in America among the more well to do.

To such an extent has this de-

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veloped that export of Big Sixes during the period mentioned, almost equalled the sum of all other American cars with an S. A. E. rating of 30 horsepower or more.

REMY ELECTRIC COMPANY WINS HEAVY FALL ORDER

The Remy Electric Company, a General Motors division, has been given an order for 4,000 lighting switches and 5,000 ignition switches by the Chandler Motor Company. Contract calls for deliveries to begin September 8.



—I'm tight?
—mubbee so, mubbee so
—but I buy
SEIBERLING
ALL-TREADS
—firroon GATES
—a-a-ny how
—for-r-r
—ma boy
—'tis a
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One of these is Ford—in the low priced field. The other is Studebaker in the fine car field.

This one-profit principle of manufacture makes possible four great advantages.

1. It eliminates the extra profits and overhead that many other manufacturers have to pay and include in the purchase price to you. This keeps Studebaker prices low.

2. It enables us to build a better car because the vital parts are designed, engineered and manufactured completely by one organization. Being built as a unit—Studebaker cars function as a unit, with all of the advantages of unit over assembled construction.

3. It makes possible finer quality because Studebaker, being an independent manufacturer, with no subsidiary or allied companies to favor, is free to buy on the open market, demanding the finest materials at the lowest possible price. Studebaker purchasing agents are unrestricted in their search for quality and value. Studebaker designers and engineers are unhampered by outside interests.

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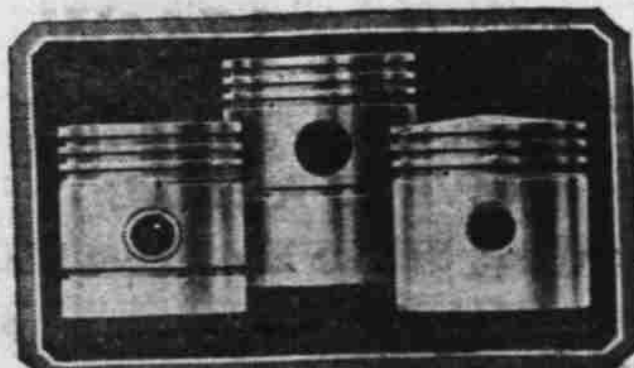
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