

HIGH COMPRESSION GOES TO CHRYSLER

New York Sun Bestows Laurels on Zedar for Excellent Performance

In any story of how high compression engines are revolutionizing the trend for America's great motoring public the names of Walter P. Chrysler and Fred M. Zedar "must stand high and come first", says the New York Sun, "for the head of the Chrysler organization and its vice-president in charge of engineering pioneered the way to new fields of motor car performance with the Chrysler high compression engine."

"They are the men", continues the Sun, "who get the credit in all automobile circles for leading the industry to high compression in 1928 after having achieved 1927's outstanding engineering feat in building engines of greater efficiency."

"Zedar has been living and thinking high compression engines for years. And Walter Chrysler, himself a human high compression engine of great power, has never had any greater interest in his business life than the automobile engine, although he has proved himself a genius in the fields of automobile organization, finance and sales. So when Chrysler or Zedar talks high compression he speaks as a recognized authority, and the automobile world looks and listens just as it does when those high powered Chryslers 'step out' on the road."

Discussing these new engines, their performance and their distinct advantages, Mr. Zedar says that "the new power plants, by utilizing modern high compression fuels, have made possible a quality of motor car performance never before realized. Power, speed, acceleration and hill climbing ability beyond any previous attainment are being enjoyed this year as the direct result of the combination of high compression engines and high compression fuels. Chrysler, pioneering in his field, we may say, has again resulted in benefits to motorists generally."

"We are just at the threshold of the touring season with its millions of Americans out to enjoy their vacations on the highways. It is the season, wherever their inclination and wishes may lead them."

"The tourist, in particular, welcomes the high compression engine. Generally speaking, he is traveling over strange roads. Many of them are hilly, even mountainous. With his high compression engine he enjoys the benefits of even more flashing acceleration, more power and torque, greater hill climbing ability, higher speed without straining the engine, and even more gasoline economy. Thousands of tests prove that our high compression engines deliver from one to three more miles per gallon of gasoline. Combined with that saving is the unmistakable thrill of power and torque sufficient to conquer almost every hill, plus the ability to cover measurably greater distances in a day's driving without increasing one's speed."

"It must be borne in mind that not all engines, even if apparently of identical compression ratios, will yield the same performance. In other words, something more is needed to be able to truthfully say, 'This is a 6-to-1 compression ratio engine.'"

"There is a vital distinction between compression ratio and compression pressure. It is entirely possible to design two engines each with 6-to-1 compression ratios and find that where one is highly efficient the other delivers much less power and speed simply because of the differences in compression pressure."

Mr. Zedar explains that compression ratio refers to the relative space occupied by gasoline vapor in the cylinder before and after the piston's stroke has compressed it for explosion by the spark. With a 6-to-1 ratio the gas which fills the cylinder at the beginning of the piston's upward stroke is compressed into a space which is only one-sixth as large at the moment it is actually fired. Compression pressure, on the other hand, has to do with the efficiency of filling the cylinder volume as affected by the valve timing and resistance to the entering charge.

WHIPPET PLANNING FURTHER EXPANSION

(Continued from page 5.)

pleted to take care of this production. "In the Whippet Four and the new Whippet Six, Willys-Overland occupies a strong price position in the two great fields of quantity output in the industry. Forty-three per cent of all motor car sales are in the light four classification occupied by the Whippet. Our present record volume production is a result of the demand for the Whippet and it is the intention of the company to steadily expand activities in this four cylinder car field. "The Whippet Six is the lowest priced six cylinder car in the world. It offers many features, as striking in the light six field, as were the features of the Whip-

pet Four in its classification when it was first announced two years ago.

"Among these features are a seven-bearing crankshaft, full force feed lubrication, long springs and roomy bodies. Twenty-three per cent of all motor car sales are in the field occupied by the Whippet Six, the light six field below \$1,000 in price. In this classification, we will develop along the same lines that we are developing the Whippet Four.

"Both cars were, at the time of their presentation, the result of a most careful engineering study and sales analysis of the motor car field as it related to future requirements and both models were planned to anticipate the requirements of motor car buyers as they would exist several years ahead.

"The Whippet Four is credited, in many places, as having set an entirely new standard of design for four cylinder cars. The same type of recognition is now being accorded the new Whippet Six.

"In the Willys-Knight line, we have continued to develop quality and at the same time to increase the dollar value of the car and have steadily lowered the price while we have been bettering the cars themselves.

"Expansion programs in the two lines are on a similar basis."

MACDONALD GIVES UP SALES AGENCY

Pioneer Dealer Will Devote Time to Repair Work, Accessories, Boats

R. N. Macdonald, pioneer auto dealer of Salem is quitting the sales end of the automobile business in order to give his entire attention and devote all the facilities of his establishment to general repair work of all kinds, body and fender work and all kinds of metal work.

The firm will carry a complete line of auto accessories, tires, etc., and handle Westinghouse Air Brakes and Spindler Spark plugs. The firm known as the Williamette Auto Supply company, will be extensively engaged in the manufacture of all kinds of motor boats made to order to suit the customer's wants and pocketbook. One of the leading models to be built is the popular sea sled which has created quite a sensation among boat enthusiasts. It is very dependable and will not tip readily.

Those interested are asked to visit the display of boats at the firm on Cottage and Ferry street and see for themselves just what is being built here in Salem. One boat on exhibit, a regulation row-boat took first prize in the state forestry exhibit.

Salem should have many enthusiastic boat lovers because of the availability of the Williamette river for the enjoyment of the sport.

In addition to the boats, a complete line of archery equipment is being manufactured which compares favorably with any made in the United States or on the continent. Tackles of all kinds are made of Osage orange Yew and Ash and are priced from \$3.75 up. One is on exhibit which has a pull of 80 pounds and another a pull 101 pounds.

Archery was the leading pastime a few years ago and indeed was often the means of securing game or protecting ones self from enemies. This sport is being revived in the east, and California is going far in organizing clubs. The same could well be done in Salem.

Keep air in your spare tire. This is almost as important as keeping up the pressure in the four tires on the wheels.

Eighty-two per cent of motor trucks in the country are privately owned.

SCHEELAR AUTO WRECKING CO.



L. A. Scheelar
Four Stores
SALEM
Tires at 341 N. Com'l
Auto Parts at 1085 N. Com'l
SILVERTON
TILLAMOOK

Not Best Because the Largest But Largest Because The Best.

WELDING STEEL TANKS FOR FORD CARS



THE gasoline tank of the new Model A Ford cars is made of steel welded into a single unit. In the photograph is shown a corner in the Fordson factory where tanks are being put through this unique welding process on big "seam-welding" machines.

The gasoline tank is one of the bath where they are thoroughly cleaned.

The new Model A Ford car and is a striking example of the quality of materials and workmanship in this latest product of one of the most remarkable industrial organizations the world has ever seen.

The tank is made of terno plate, which is sheet steel coated with zinc to prevent rust and corrosion. The steel sheets from which the tank is made are from .049 of an inch to .051 of an inch thick.

The two halves of the tank are first pressed out into shape in huge metal presses and these two halves then go to the assembly line which leads to the welding machines. The opening for the gasoline inlet is stamped out of the upper or cowl section and the filler flange for the cap is rolled into the opening.

A steering column bracket is riveted on the outer side at the bottom of the lower portion of the tank and these rivets are all treated with tin plate to prevent corrosion. An ignition cable support also is welded to this lower section and baffle plates are soldered inside to prevent the splashing of gasoline when the car is in use. Then the two tank halves go into a soda

which is being used to test frequent samples of the finished tanks. In this test the tank is filled with seven or eight gallons of water and placed upon an agitator or "shimmy" machine which stimulates driving conditions over an extremely rough road at a high rate of speed. In some of these tests sample tanks have been thoroughly jounced and jolted continuously for four or five weeks without developing any leaks or manufacturing flaws.

During the experimental stages last summer several of these tanks were blown up by air pressure until they looked like balloons but the welded seams held perfectly against the terrific pressure. When finished, the tank is mounted in the car to form the cowl, and it is separated from the engine by a solid steel dash.

CHEVROLET SNOW BOAT BRAVES ALASKA DRIFTS

(Continued from page 5.)

Since that time the number of automobiles has increased from year to year in the Fairbanks district, until today there are more than 1,000 cars and trucks in the vicinity, representing a total investment of more than a million and a half dollars. They include 15 different makes, ranging in price from \$500 to \$5,000.

Eight automobile dealers, in business in the Fairbanks district have organized themselves into the Fairbanks Automobile Dealers' association. It was this group of men who promoted the automobile show. There are five automobile garages and repair shops in Fairbanks, where first-class mechanics are employed. Three warm-storage garages are maintained, where cars may be stored during the long winter season.

Good roads have followed the advent of automobiles in Alaska and today there are more than 500 miles of excellent thoroughfares available to motorists of Fairbanks—three times the mileage of any other town in the territory. Motor car owners of the states

who contemplate a vacation trip to the pleasant country of Alaska and there are hundreds of them, may secure information on any subject desired by communicating with the dealers of Fairbanks. These men will be glad to supply data on touring, road conditions, service facilities, etc.

Oldsmobile owners should get in touch with Standard Garage company, F. B. Johnson, Oakland-Pontiac and Chevrolet dealer is at the service of owners of his cars and the Samson Hardware company, Buick dealer will gladly care for Buick owners.

The Chevrolet, through years of dependable service and economical transportation, has become one of the most popular cars in the far north, a country which offers a meritorious proving ground for the stamina of a motor car.

Alaska is a coming country. It is delightful scenically, wealthy in natural resources and an unexcelled tourist playground.

\$20,000 MILES NOW ON FEDERAL PLAN

(Continued from page 5.)

able to all State highway departments for construction and maintenance of roads and bridges will

exceed \$750,000,000, and local revenues, expendable by county and local authorities, will swell the highway total to upwards of \$1,300,000,000.

The A. A. A. points out that details are not available concerning the work to be done by county and local authorities. It is anticipated that the year's work under state supervision will result in the construction of nearly 9,000 miles of hard-surfaced pavements, upwards of 12,000 miles of less expensive surfaced roads, and 8,000 miles of roads adequately graded and drained.

Every year the motor-tourist ventures a little further afield during vacation time. This is caused chiefly by the tremendous improvement in highway all over the country coupled with the advancement in automobiles themselves. A jaunt of 1,500 miles during the average two week vacation leaves plenty of time for stops en route during this day and age.

The proper use of hand signals in driving is extremely important and many times prevents serious accidents.

POWER - ECONOMY - PERFORMANCE - RESULTS OF LUBRICATION

Monroe S. Cheek

Complete Automotive Lubrication
Court at Capitol Phone 2295

Durant

sales in May greatest in Durant history

even greater than in April when

- Oregon sales placed Durant in 3rd position
- Utah sales GAINED 86% and Durant jumped to 2nd position
- Washington sales GAINED 50%
- California sales GAINED 68%
- Durant was FIRST, or tied for first in 72 California cities and towns
- Durant was SECOND, or tied for second, in 47 California cities

DURANT STAR \$495

(R.O.B.LANSING)
FOUR

LARGEST CLOSED CAR FOR THE WORLD'S LOWEST PRICE
SILVER ANNIVERSARY SIXES ALSO ON DISPLAY

SALEM AUTOMOBILE CO.

235 N. Church St. Telephone 97
H. E. SHADE C. J. TAYLOR H. J. WOOLEY



Moving and Storage

Remember the Larmer Transfer and Storage has moving vans and good supply of blankets and pads for furniture handlers.

Have just completed our new three story concrete warehouse and are now well prepared to handle best of furniture and pianos.

Wh-call 930 and let us serve you.

Larmer Transfer & Storage

SALEM, OREGON

FOR BATTERY and AUTO ELECTRICAL SERVICE

See

JOE WILLIAMS

"The Battery Man"

Corner Center & High
Telephone 198



JOE WILLIAMS



A Car for all the family to enjoy—the Coach only \$585



- The Touring or Roadster \$495
- The Coach \$585
- The Coupe \$595
- The 4-door Sedan \$675
- The Convertible Sport Cabriolet \$695
- The Imperial Landau \$715
- Utility Truck \$495 (Chevy Only)
- Light Delivery \$375 (Chevy Only)

All prices f. o. b. Flint, Michigan

Check Chevrolet Delivery Prices. They include the lowest handling and financing charges available.

Revealing in its beautiful bodies by Fisher the comfort, style and elegance that women all admire... offering the drive, dash and stamina that men demand in an automobile... and so easy and safe to handle that every mile at the wheel is a pleasure—the Bigger and Better Chevrolet is bringing a new measure of motoring enjoyment to thousands of families.

Providing the roominess, comfort and roadability of a 107-inch wheelbase... equipped with powerful, non-locking 4-wheel brakes... and with its worm-and-gear steering mechanism fitted with ball bearings throughout—it is everywhere acclaimed the world's most luxurious low-priced automobile!

There are seven beautiful models. Come in and inspect them today.

Douglas McKay Chevrolet Co.

430 N. Commercial Street, Tel. 745

Dallas Chevrolet Co., Dallas Associate Dealers: Ed Bros., Turner Geo. Dorr, Woodburn Hallady's Garage, Monmouth Wm. Predeck, Mt. Angel

QUALITY AT LOW COST