

PROGRESS MADE IN CAR PROBLEM

Automotive Engineers
Expend Months of Effort to Learn More

Just what occurs when gasoline vapor is introduced into a cylinder combustion chamber, compressed and fired is a problem that has baffled automotive engineers. However, they have made progress in its solution with the resultant increase in power and smoothness of operation found in the better cars of today.

Study of the problem is comparable to the youthful researcher who, on July Fourth, holds a lighted fire cracker in his hand "to see what will happen." Both the boy and the automotive engineers are dealing with something that operates practically instantaneously and with terrific force.

Principles Well Known
The principles of an internal combustion engine are well known. Vaporized gasoline is mixed with air, heated, and then drawn into the cylinder by the downward stroke of the piston. The upward piston stroke compresses the vapor and an electric spark explodes the mixture, the resulting explosion transmitting energy to the engine by means of the power stroke of the piston.

Engineers also know that increasing compression increases power, up to a certain point and then power is lost and "detonation," or what is commonly known as a carbon knock, results. Also they know that different curves in the combustion chamber influence the useful force of the explosion.

Months of Effort
During the two years that the new Oldsmobile was being designed, months of effort was expended to obtain best results in combustion.

SUNNY SPRING WEATHER LURE TO MOTORISTS

The sunny days of spring inspire one big impulse—to load the camping equipment into the car and head for the hills.

That is exactly what hundreds of automobile owners are doing right now or preparing to do in the very near future, according to the local manager of the Western Auto Supply company.

"Nearly every grove of trees along the highway from coast to coast shelters an automobile camp," he says. The modern auto camp is equipped with all improvements that the camper could wish for and all of his needs are supplied at a low cost.

"This all brings one right to the heart of the subject, namely, camping equipment. This is of interest to practically everyone who goes on an automobile vacation tour as statistics show that four out of every five cars entering the National parks are equipped for camping. There is no time like the present for looking over the equipment stored away in the garage and adding to it the things that were needed on last year's trip.

"The Western Auto Supply Company's stores have prepared for this annual call that comes about this time of the year and have supplied all of their stores with all that is new and practical in camping equipment."

SAFETY IN SCHOOLS
The teaching of safety and traffic regulation is part of a child's education now in the public schools of seven states.

Oldsmobile engineers worked in co-operation with the engineering staff of the General Motors Corporation and had at their disposal the laboratories and equipment of the corporation in solving this problem.

This co-operative effort resulted in a new design of combustion chamber which gives high compression performance without the use of special fuel. The compression ratio is 5 to 1 or approximately 98 pounds. The design further controls the explosion so that the rise of pressure within the chamber and cylinders is progressive and the pressure peak is more nearly continuous. This results in additional useful power per explosion.

Two distinctive features spring about this desired result. One is the step-like profile of the chamber roof above the pistons and the other is the curves that form the four sides of each chamber. These factors govern the rate of expansion of the burning gas within the cylinders and bring about the advantages of high compression without "roughness" or detonation.

Durant Models Are In Demand Over The West

Jumping ahead in a spectacular fashion during April, the Durant Sixes and Durant-Star Fours showed a tremendous increase in sales. A 68 per cent increase over April of last year was registered in California sales. Durant secured second place in Utah registrations with an 86 per cent sales gain. The line jumped from sixth to third place in Oregon registrations, and gained 50 per cent in Washington sales, according to Norman De Vaux, general manager of Durant Motors in the west.

A full report of California registrations shows that Durant led or was tied for the lead in 72 cities and towns, and was second or tied for second in 47 other California cities and towns. Durant was first in such representative cities as Corvallis, Clatskanie, Astoria, Astoria, Clatskanie, Warrenton, San Dimas, San Jacinto and Cambria. Durant was second in Stockton, being tied there and in a number of other cities by only one other car, a four cylinder which has held the registration leadership for several months.

A Close Second
Durant is a close second in such key cities as Portland, Vallejo, Stockton, Lodi, Ukiah, Westwood, Lancaster, La Jolla, Attaca, Auburn, Red Bluff, Crockett, Los Gatos, San Pedro and Yuba City. Incomplete figures for Northern California give Durant fourth place in registrations already for May.

Production at the Pacific Coast Durant factory for April increased practically 100 per cent over March production, and would have been even greater but for difficulty in securing materials. All of the sixes are now in production and these models will be manufactured in great numbers during May. Orders for both the Durant Sixes and the Durant-Star are still pouring in, necessitating a further output, according to George R. Morris, sales manager of the Pacific Coast Durant factory.

The May schedule of the Durant western plant calls for a production of 3500 automobiles. More men have been added to the payroll during the past month and the movement of the production line has been speeded until now the factory is building 150 or more cars a day.

NEW CANADIAN RULE
Canada has passed a ruling that all automobiles brought into the country with a touring permit are subject to confiscation if caught being used for any commercial purpose.

GARAGE GOSSIP

Buy Chrysler—
D. D. Miller, of La Grande, is driving a Chrysler sedan which he purchased from Weeks & Buchanan.

Buy Whippet Six—
Joe Johnson, of this city is driving a new Whippet six coach which he purchased from W. D. Hanks, of Gettings & Hanks garage.

Flowers Blooming—
Passing tourists frequently comment on the beauty of the Perkins Motor company service station next to the La Grande hotel. The station has been repainted in its clean and attractive red, white and blue, and the flower beds and road, beautifully kept, lawn about it make it very pretty. Mr. Perkins takes a special pride in the colorful little flower beds about the station, that not only make the lot itself beautiful but add to the attractiveness of the entire block.

Goes to Enterprise—
L. W. Weeks, of the Chrysler garage, made a business trip to Enterprise Tuesday.

Buy Chevrolet—
Mrs. A. E. Mitchell, of Union is driving a new Chevrolet coach purchased from the Blue Mountain garage.

Adds New Equipment—
Additional equipment in the tire department of the Perkins Motor company has been installed. This includes two new vulcanizing cars to take care of the tires which are mounted on 15 and 19-inch rims. This is the new type smaller wheels which are being introduced on many cars.

Went to Enterprise—
M. J. Goss local garage owner spent several days in Enterprise this week, going up Wednesday morning.

Here From Portland—
J. H. Snoddy, president of the Studebaker corporation branch of Portland, was a business visitor at the M. J. Goss garage during the week.

Is in Enterprise—
Roe Buchanan is spending several days in Enterprise. Mr. Buchanan is salesman at the M. J. Goss garage.

Making New Fords—
W. C. Perkins reports that the four door Fords are being manufactured at the rate of about 100 and the Business coupe at the rate of about 200. The production on these two models will be increased rapidly and by 20 days they will be making the same proportionate number as they have been on the two-door and sport coupe, he says. They expect another carload next week.

Expect Cars—
A carload of Chevrolets is expected some time today at the Blue Mountain garage.

Here From Pendleton—
Mr. Ritchey of the Foster-Richey Motor company of Pendleton was in La Grande during the week transacting business at the M. J. Goss garage.

Went to Enterprise—
W. D. Hanks went to Enterprise Thursday where he was called to be a witness in circuit court. Mr. Hanks is Willys-Overland dealer here.

Buy Chevrolet—
Mrs. W. E. Graham is driving a new Chevrolet coach which she purchased from the Blue Mountain garage.

Go to Baker—
Le Roy Frank, United States Rubber company representative was here on business Wednesday and Thursday went with M. A. Harrison to Baker on business. Mr. Harrison is Chevrolet dealer in La Grande.

Showing Franklin—
Mr. McClure, Franklin dealer in this territory, was showing on the streets yesterday a late model de luxe sport sedan in gray with wire wheels, an exact copy of the car chosen from all American cars offered to the famous flier on his return to America—no less than nine famous aviators including Chamberlain, Acosta and Byrd drive the Franklin air cooled car. The series has therefore been called the aviator series.

Willys-Overland Breaks Records For Day Output

TOLEDO, O., May 26. — The Willys-Overland company broke all its previous high production records on Tuesday, May 23, when the company turned out a total of 2,020 Willys-Knight and Whippet cars, an increase of 220 cars or more than 12 per cent over the previous high record of 1810 cars produced on April 19. This is the largest single day's production ever attained in the 20 years' existence of the company. It is one of the high rate of production the company still has unfilled orders for more than 30,000 cars on its books. From May 1 to 15, production totaled 19,900 cars as compared with 17,792 cars during the first 15 days of April. Production last year for the first 15 days of May was 12,778 cars and from April 1 to 15, 1927, output totaled 12,147 cars. Production for the first quarter of this year was 76,628. With production totalling 23,500 cars during April and with May output now passing 2,000 daily, production for the first half of the second quarter as of May 15 amounted to 28,460 cars or a total of 135,158 cars for the first four and a half months as compared to an output of 126,301 cars for the entire first six months of last year.

The company's production was increased from 16,239 cars in January to 34,833 in March but April production exceeded March by nearly 4000 units. Aggressive expansion of Willys-Overland in the automotive field is further illustrated by the fact that more than 1100 new dealers have been added since January 1 or an increase of 23.2 per cent in its distributing organization. Employment at the Toledo plants also has reached a new top with nearly 22,000 persons on the payroll.

Little Sniffleblister: Say, Uncle, when are you going to play football again?

The Rich Uncle: Why, I don't play football. What makes you ask me that question?

Little Sniffleblister: Well, Pop, says that when you kick off we are going to get a brand-new automobile and a house.

—Stevens Stone Mill

Don't neglect that faithful servant under the hood



Give a thought to the AC Oil Filter on your car. It's always at work for you when your engine is running. Let us test it for you without charge.

Dirt in oil means wear. That is why you should have the oil filter tested regularly. An AC Renewal Cartridge makes it as good as new.

We can tell you very quickly whether or not a new Cartridge is needed. We can quickly install it for you if you say the word.

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Finer BODIES, richer COLORS, added POWER

WILLYS-KNIGHT

GREAT SIX SEDAN \$1995

More than ever
the leader in quality car values

Having long held front rank with America's most luxurious cars, the Willys-Knight Great Six is now advanced and perfected to a degree of superiority which few automobiles ever attain.

Low, sweeping lines are beautifully expressive of the most

modern tendencies in body design. Perfect symmetry obtains throughout, from the tapering, aristocratic hood to the smoothly curving back. Many new colors offer a wide selection of exquisite blendings.

Interiors are spacious, luxuriously upholstered and tastefully

appointed, embodying many exquisite refinements of detail which result in true distinction.

Drive the Great Six, and you thrill to performance such as you have never known before—a smooth, unfailing flow of power, silently and effortlessly delivered.

High compression with any gas. Engine grows smoother with use.

In the patented Willys-Knight engine, two sliding metal sleeves in each cylinder combine with the spherical cylinder head to form a perfectly sealed combustion chamber. This head directs the full force of the explosion straight downward against the piston, making the most efficient use of the highly compressed gas.

As a result, the Willys-Knight engine gives high uniform compression—maximum power with uniform smoothness—at all times, at all speeds and with any gas. And the Willys-Knight is the only type of automobile power plant that constantly keeps growing even smoother and quieter with use.

Willys-Knight Sixes from 1920 to 1928. Prices \$1,000 to \$2,000. Factory and specifications subject to change without notice. Willys-Overland, Inc., Toledo, Ohio.

STANDARD SIX COACH
\$995

The new Standard Six is the climax of fourteen years' effort—a car maintaining all of Willys-Knight's quality supremacy, at the lowest price in history! Willys-Knight's many superior advantages are now brought within easy reach of thousands of added buyers.

SPECIAL SIX SEDAN
\$1495

Always popular with experienced motorists, the Willys-Knight Special Six is now still further advanced and distinguished by such modern features as full crown fenders, window reveals, steel-rimmed roof and beautiful new color options. Truly one of the year's outstanding values.

Gettings & Hanks

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FROM COAST TO COAST

Uniform Quality

Unexcelled Service

TEXACO

Golden Motor Oil

New Gasoline

The Texas Co.

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got the job

He was only a few dollars higher than the lowest man—he agreed to finish the work in 100 days—the other man wanted 140 days!

Time is the essence of many a contract these busy days—the owner of "CATERPILLAR" equipment has the edge on the other fellow. To get the job without cutting a fair profit—to finish it up speedily—then to get another job—so does the contractor learn the truth of the "CATERPILLAR" slogan—

BETTER, QUICKER, CHEAPER!

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