

DR. ONG DEVELOPS UNIQUE GAS SAVER

Portland Man's "Automizer" Gives Remarkable Results in Exhaustive Tests.

SIMPLICITY BIG FEATURE

Little Device Consisting Merely of Annular Grooved Flange Breaks Up Surface Tension of Gasoline From Carburetor.

A Portland man, Dr. H. F. Ong, has developed a remarkable little device for increasing the oil and gasoline efficiency of all makes of automobiles and other gas engines that is attracting the attention of motor car engineers all over the country.

His device is called the "automizer." It is nothing more than an annular grooved flange of cold rolled steel, varying in diameter from about an inch and a half to one inch, varying in size for different makes of carburetor, which is placed between the carburetor and the intake manifold of any car.

One of the cardinal virtues of this little device is its extreme simplicity. Yet despite its simplicity it makes use of an entirely new principle in carburetion. It has been tried out in a series of exhaustive experiments on cars and trucks, and in every case where the intake manifold was coated with results have been truly remarkable in giving increased oil and gasoline mileage.

With the market literally overwhelmed with different "gas saving" contraptions, some of which are good and many of which are not, motorists quite naturally have become a bit skeptical of inventions of this sort.

When a man in the automobile business becomes as enthusiastic over the performance of a device that he will give up a good position to handle it, motorists in general will watch it with deep interest.

Nearly everybody in the automobile world hereabouts knows Roy Wilson, road and territory man for the Manley Auto Company. Well, Mr. Wilson made a series of very careful tests with the automizer, the result of which has been that he became so thoroughly convinced of its merits that he has resigned and gone to Southern California to take over the rights to the automizer and handle it in that territory.

Automizers on Delivery Fleet. The Meier & Frank Company has installed automizers on all the automobiles of its big delivery fleet. This was done only after extended tests, of which the most minute records were kept, had demonstrated its efficiency.

Dr. Ong developed the automizer in spare moments, mostly at night, as a diversion from his big surgical practice. He had long been convinced that something vital was lacking in the construction of the modern carburetor.

In carrying out his experiments he replaced part of the intake manifold of his car by a glass tube. By means of a high power nitrogen light placed behind the tube, he was able to note exactly what occurred after the gasoline mixture left the carburetor.

He very quickly demonstrated that the wire screens, butterfly valves, perforated cones and the like used in carburetors not only do not give the proper mix, but fall utterly to distribute this mix properly. The action of the valve in the carburetor, which his experiments showed, deflects the mix to one side of the intake manifold. Instead of expanding and filling the circumference of the intake manifold, the mixture remains on that side.

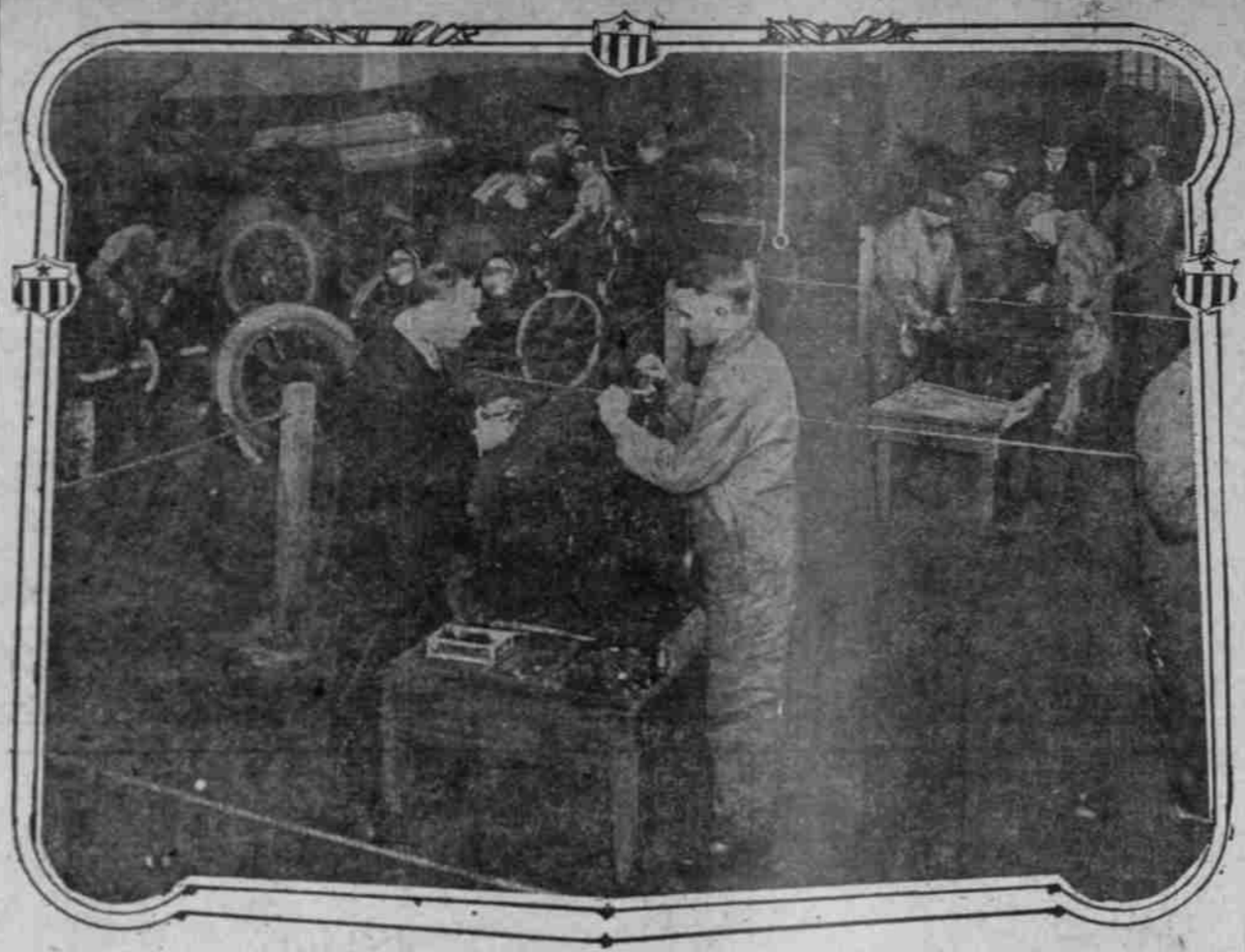
Moreover, the air on the other side does not mix with the gasoline. His experiments showed that there seems to be as definite an antipathy between them as between oil and water. The result was, and is, that the cylinders at one end of the motor receive more of the liquid gasoline than those at the other end, the result being that certain cylinders become weak and dirty.

Engineers Overlook Principle. Finally, after prolonged experiments, Dr. Ong discovered that a physical phenomena, known as the surface tension of liquids, prevents the gasoline or other fuel from entering the air in a condition that is what does the work, as many persons suppose, but dropped through a screen, the surface tension causing them to assume the shape of perfect spheres.

Ordinary Mixture Friction. The law of the surface tension of liquids is that every liquid inherently assumes a shape which exposes the least exposed area and arranges its surface molecules in such a form as to resist disintegration. In short, it forms a tough protecting skin over the liquid.

The throttle valve of almost every car," explains Dr. Ong, "whether placed vertical or horizontal, is arranged so as to deflect the gasoline or other fuel against the wall of the intake pipe, which it follows to the cylinders as water follows wood by capillary attraction. Gasoline or other liquid fuel entering the cylinder in liquid form will not explode. It will fly into smoke, spilling the incoming gas, making much carbon and faking the engine fire unevenly and lose power.

GOOD DODGE CAR SALESMAN SPOILED WHEN SACRAMENTO SIGNED UP NEW BASEBALL MANAGER



William K. (Bill) Rodgers Went at It Right When He Started in With the Covey Motor Car Company to Sell Dodge. The Photo Shows Rodgers (on Right) Studying the Motor of the Dodge Car, with S. R. Hemphill, at Hemphill's Trade School.

It really is quite too bad that William K. (Bill) Rodgers, captain of the Portland Beavers in the late Pacific Coast League, wasn't able to turn his back to temptation when Sacramento asked him to manage its team next year, for the boys up at the Covey Motor Car Company all say he had the makings of a rattling good automobile salesman. Bill went to work for Mr. Covey a couple of months ago selling Dodge cars, and he made good at it. He displayed the same seriousness of purpose as he used to do when he went to bat for the Beavers with the home team three runs behind in the ninth inning. Instead of taking the automobile motor for granted, Bill went to A. S. Hemphill, manager of Hemphill's Trade School, and got Mr. Hemphill to put him through a complete course of instruction in the Dodge motor and other mechanical parts. Maybe it won't help him in solving problems of baseball mechanics next summer, but if he ever sells automobiles again—and Bill says he will—the knowledge will stand him mighty handy.

which serves to seal the rings when the engine is not firing. "But as soon as the engine begins firing, this coating burns off with every shot. This means excessive friction, poor compression and loss of power.

Automizer Protects Oil. The automizer attains its remarkable results not only because there is complete combustion of fuel, but more than that, because the automizer thus protects the crank case oil from dilution by the heavy portion of the so-called gasoline used today, which either winds up in the cylinders in liquid form. This ruins the crank case oil by lowering its flash point and causes it to char on the cylinder walls with every explosion, which creates great friction with loss of compression and power.

The automizer is not the first device perfected by Dr. Ong to increase automobile efficiency. Some years ago he developed a device to improve carburetors which is now largely used in the manufacture of the ordinary carburetor.

LONG CAR LIFE SOUGHT

NATIONAL COMBINES LIGHTNESS WITH DURABILITY

A. B. Manley Points Out That Mere Lightness Has Limit Beyond Which Auto Cannot Go.

"The investment element is today the strongest feature in both the inquiry and selling ends of the automobile business," declares A. B. Manley, president of the A. B. Manley Auto Company, the local distributors of National Highway cars.

"Only a short time ago the cry was for lightness and practically all manufacturers strove to reduce weight and to keep on reducing. The wide range of general and business purposes for which a passenger car is now used has demonstrated, however, that the weight necessary to insure durability has a decided minimum point, below which rapid depreciation overcomes the savings brought about by lightness.

"Thus, many prospective purchasers now talk about five, six and seven-year life and figure first cost only as an item of the total cost of owning an automobile. The lighter car attracted largely because of its lighter first cost. Now weight is wanted up to a point where it will not be a fuel and tire killer, and the somewhat lessened gas mileage is more than balanced by extended car life, to say nothing of ease in operation.

"In their constant efforts to produce an ideal weight and still satisfy most tastes as to appearance and comfort, National engineers have evolved a car of maximum durability that is from 500 to 1000 pounds lighter than other cars of the same class in appearance, power and comfort, while the price is correspondingly less."

BEARINGS STOCK LARGE

BEARINGS SERVICE CO. HAS COMPLETE EQUIPMENT.

BIG SHIFT IS MADE

Cliff Durant Quits Chevrolet to Handle Scripps-Booth.

C. M. STEVES IN WITH HIM

Pacific Coast Sales Manager for Chevrolet Forms New Company to Distribute New Line on Coast From Oakland.

From Oakland, Cal., came the announcement yesterday that R. C. Durant, better known as "Cliff" Durant, automobile racer, Pacific Coast sales manager for the Chevrolet Motor Company and head of the Chevrolet Motor Company, of California, has severed his connection with that organization and will take over immediately the distribution on this Coast of the new Scripps-Booth line.

He has formed the Scripps-Booth Company, of California, of which he will be president and general manager. Associated with him in the new organization will be Norman Devaux as vice-president and Clifford M. Steves as secretary and sales manager.

Mr. Steves, particularly, is well known in Portland, for he has been here since December, 1916, as manager of this territory for the Chevrolet Motor Company, of California. With the recent establishment here of a Portland branch and Chevrolet distributing headquarters for the Northwest, he became branch manager also.

GERBER HAS OWN SHOP

RADIATORS SPECIALTY OF EXPERIENCED REPAIR MAN.

Sheet Metal Parts and Repairs for Autos Generally Handled in His New Location.

Automobile radiators and their ailments are the specialty of G. G. Gerber, the "radiator" man, who after many years as manager for the firm of Burness & Martin recently severed his connection with them and has opened a shop of his own at 53-55 Ninth street North, corner of Davis street.

Of course, radiators are not the only parts about an automobile for which Mr. Gerber is equipped to give service. Though their manufacture and repair are his specialty, he also operates a first-class auto, sheet metal manufacturing and repair shop. Besides radiators, he manufactures and repairs fenders, gas tanks, mufflers, dust skirts, hoods, windshields, bent bodies and sheet metal parts of various kinds for automobiles.

How down and proceed with caution at intersecting streets, blind corners, school crossings and bridges. Don't stop suddenly.

9 New Body Styles

—nine masterpieces of Velie Coach building, show as never before the capabilities of the great Velie factory—a car to meet the choice of every possible purchaser—at prices from \$1340 to \$2400.



performance—power, speed, flexibility, quick acceleration and low gasoline consumption, result from the famous Velie features—Red Seal Continental motor, Timken axles and bearings, perfect ignition. Comfort supreme is yours in the deep seats, soft upholstery and long underslung springs. See the new Velie at our sales-room today—we invite you to ride in it.

D. C. Warren Motor Car Co. Distributors 48-60 North Twenty-third Street Phone Main 780

VELIE MOTORS CORPORATION, Moline, Illinois

SALES PLAN NEW

Willys-Overland to Bring Factory Closer to Dealers.

CO-OPERATION IS PURPOSE

Country to be Divided Into Seven Districts, Each in Charge of Division Manager, Frank C. Riggs Being Western Head.

Willys-Overland, Inc., of Toledo, through Edwin B. Jackson, vice-president in charge of sales, has just announced a new plan of organization of the company's sales department, made to bring the facilities of the factory into closer touch with the company's dealer organization. This new plan of organization is expected to result in material benefit to Willys-Overland dealers.

Under this system the company's sales policies will be carried out on the division basis, for which purpose the country is divided into seven divisions. In each division will be stationed a resident division manager with power to make decisions for the company with distributors.

The adoption of this plan brings two new executives into the Willys-Overland organization. J. L. Handley, who will be manager of the East Central Division, with headquarters at Toledo, comes to Willys-Overland, Inc., from the Mutual Motors Company, of Jackson, Mich., of which he has been president since 1915. Mr. Handley has been in the automobile business for the past 10 years, having organized the Maxwell-Briscoe-Handley Company to distribute Maxwell-Briscoe cars from Dallas, Texas, in 1907.

In 1908 he took charge of the financial and sales work of the parent company in the Chicago district. He went to New York City in 1910 to accept the vice-presidency of the U. S. Motors Company, and in 1912 was made president of the Marion Motor Company, Indianapolis. In his new connection Mr. Handley will have associated with him W. G. Northrup, East Central District sales manager.

Cl. Barber, the other new acquisition to the Willys-Overland sales force, who will be manager of the West Central Division, with headquarters at Moline, Ill., has been since 1908 associated with the Moline Plow Company. Mr. Barber entered the employ of the Moline Plow Company as a salesman at the Kansas City branch. He was in successful connection with the company's branches at St. Louis and Minneapolis. Later he returned to Kansas City as manager of the branch at that place, following which he was made general sales manager, with headquarters at Moline. Mr. Barber will be associated with Mr. Butler as district sales manager.

William L. Colt will be manager of the Eastern Division, with headquarters in New York City. Mr. Colt was until recently manager of the New York City branch of Willys-Overland, Inc. He was the organizer of the Colt-Stratton Company, New York City, Eastern distributors for Cole and Ludge cars. E. R. French is associated with Mr. Colt as district sales manager.

George H. Cox, until recently assistant director of branches, will be manager of the Mid-Western Division. Mr. Cox joined the Willys-Overland forces two years ago following eight years with the Thomas B. Jeffrey Company, of Knoxville, Wis. He will make his headquarters at Kansas City, Mo.

The other division managers will be: Frank C. Riggs, Western Division, with headquarters at San Francisco; E. N. Culver, Southern Division, headquarters at Atlanta, Ga.; and C. M. LeRoux, Northwestern Division, headquarters at Minneapolis.

George M. Berry, formerly director of branches, and K. R. Jacoby, formerly assistant sales manager, will be associated with Vice-President Jackson as assistant commercial managers. The branches of Willys-Overland, Inc., will

REPUBLIC FOR EVERY LINE OF BUSINESS. Every day Republic construction and the Republic-Torbensen Internal Gear-Drive are demonstrating superior service and lowest operating cost wherever trucks are used. Whether you require a 1/4-ton job, 1-ton, 1 1/2-ton, 2-ton, 3 1/2-ton or 5-ton, the Republic will best solve your problem. Roberts Motor Car Company Distributors PARK AT FLANDERS INTERNAL GEAR DRIVE MOTOR TRUCKS

OIL IS VERY LIFE OF LEATHER. Upholstering From Cracking. Leather is too expensive nowadays to be neglected, says Milestones. A little care and thought expended on the upholstery of your car will lengthen its life tremendously. The time you spend in protecting it will pay you good dividends in lengthened service and improved appearance. If the leather gets wet wipe it off when you come into the garage. If you stop with the top down, try to pick a shady spot. Heat and moisture are the enemies of leather. Oil is its life. As the leather dries out do not wait for it to crack open, but give it a coat of cushion dressing or rub linseed oil into it. The way to keep up prosperity is to keep up buying. NEW ANDERSON PATENT AUTOREELITE Drivable, Searchlight and Automatic Extension Inspection Light. THE 3-IN-1 LAMP Spot-Light, Trouble-Light, Pleasure-Light. Something MORE Than Just a Spot-Light. Silver Parabolic Reflector. Makes fire changing and repairs as easy by night as by day. W. S. FLEMING, Distributor for Oregon AUTO, PLUMBING AND ELECTRICAL SUPPLIES, 112 FOURTH ST.

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