

GRATIFYING YEAR IN AUTO BUSINESS

Motor Trade Unusually Good Considering Peculiar Conditions Throughout Country

By J. J. COLE, President Cole Motor Car Co. Considering the many unusual circumstances surrounding the business procedure of the country during the last twelve months, the motorcar industry, by and large, may be said to have experienced a most gratifying and beneficial year.

The leveling process which always follows an era of extreme prosperity has visited hardships on some, but in the main, the substantiality of the industry as a whole has been apparent and the soundness of its business judgment proven conclusively by its ability to adapt itself to the many variable conditions.

We have learned much in the last twelve months. We are vastly better off for the experience. We are contented. On every hand we see a conscientious effort to improve—to take advantage of every possibility to build upward toward the most stable and dependable footing—to give to the motoring world the very best which it is possible to build under normal conditions.

Consequently, the year 1921 has arrived to find the motorcar industry in a most hopeful frame of mind. The average business for the new year gives every promise of equaling if not surpassing the volume for 1920.

It seems certain that any discrepancy between the amount of business done during the first six months of the year will be more than offset by the healthy increase which every one anticipates over the last half of the year just past.

We are persuaded that the automobile-buying public is convinced of the logic of the idea that it is not having clean but low good a product is that determines whether or not it is an unproductive investment.

This is, likewise, the opinion that has permeated the entire industry—it is the policy which will govern the constructive efforts which will characterize the return of the automobile industry as well as every other business to a normal status.

The expense of operating under the high pressure of the last two years was enormous. The difficulty of obtaining labor that was adequate for the task imposed as well as materials involved expenditures which were appalling.

Furthermore, the demand for cars which increased so markedly during the last twenty-four months will experience only an unappreciable decline. The percentage of present owners of cars will not be lowered very considerably.

Consequently, competition is destined to be quite as keen both in the material and labor markets as well as in the retail and wholesale markets of the industry. Manufacturers are justified in taking advantage of every possibility to keep their costs down as low as possible without sacrificing quality, but if they

would improve their products whenever improvements are possible, present prices cannot be lowered very appreciably.

Had the automobile industry as a whole been at all negligent of its responsibility to the ultimate buyer of cars and failed to afford 100 cents of value for every dollar invested with it, the phenomenal rise of this industry would not have been accomplished.

It will be the purpose of the industry in the future, therefore, to see that this faith is not broken. It has dedicated itself to the purpose of serving the world of business and recreation honestly, adequately and well, and whatever it achieves in the future is destined to build higher and higher the monument to the integrity of the automobile industry and to the service and usefulness of the passenger car.

HUGE WASTE IN GALLON OF GAS

Faulty Carburetor Often Causes 30 Per Cent Loss, According to the Chemist

That of every gallon of gasoline used in a motorcar nearly 30 per cent is wasted through faulty carburetor adjustment resulting in imperfect combustion, is one of the startling conclusions derived from exhaustive tests of the composition of automobile exhaust gases by three of the prominent chemists of the United States bureau of mines, working in co-operation with the New York and New Jersey state bridge and tunnel commissioners for the purpose of determining engineering facts in connection with the ventilation of vehicular tunnels.

A. C. Fickler, A. A. Straub and G. W. Jones, chemists of the Pittsburgh experiment station, United States bureau of mines, who conducted these experiments, stated that perfect carburetor adjustments should result in saving half this amount. They asserted that the great majority of motorcars and trucks are operated on rich mixtures suitable for maximum power, but very wasteful from the standpoint of gasoline economy. They said that the average motorcar carburetor is set for winter operation and is not changed in summer.

They urged that the public should be impressed with the saving in gasoline resulting from the use of lean mixtures, and suggested the general installation of a small gas sampling tube in the exhaust pipe of motorcars, especially trucks and vehicles used by taxicab and trucking companies, for the purpose of securing carbon dioxide determinations, thereby making proper carburetor adjustment possible. They pointed out that such companies could well afford to employ a chemist to make regular control tests, and that the results of such a practice would be great economy in operation and saving of gasoline.

Whence the Name?
The name "Goodrich" is derived from the name of its founder and the name of the company producing machinery of steel.

BATTERY TROUBLES FAULT OF OWNERS

Distilled Water Absolutely Essential to Keep Up Electric Parts of Autos

Nearly all battery troubles are due to the owners' failure to observe a few simple instructions. The motorist who gets the greatest power, the most service and the longest life from his storage battery is the one who is cautious in the care of it and makes it a practice to examine it at least once every week in summer and once every two weeks in winter to see that the liquid solution is up to the proper level.

These periodical tests are highly important. They enable you to tell in advance when your battery is in danger of being ruined through overcharging or overheating, when minor troubles in the electrical system are draining the strength and endurance of your battery, when an inexpensive freshening charge would save expensive dismantling and rebuilding later.

Here are a few simple instructions, which, if followed, will lengthen the life of your battery, and give more satisfactory service.

Under no circumstances use anything but pure distilled water. "Boiled" water will not do. It must be distilled water from which all impurities which would injure the battery have been removed. If you do not care to add distilled water yourself make arrangements with the nearest service station to do it for you.

Acid or electrolyte should never be added except by an expert battery man. All metal parts of connectors, which are not lead-coated, should be kept covered with a thin coating of vasoline. Look at your battery occasionally, and if the solution has sunken or spilled, wipe clean with a moist sponge. Don't lay tools, or anything else, across the top of your battery.

Remember that your battery is a storehouse of electricity. It should be kept cool and dry. It should be kept in a well-ventilated place. It should be kept in a safe place. It should be kept in a place where it will not be damaged by fire. It should be kept in a place where it will not be damaged by lightning.

pected to keep spinning your engine several minutes at a time. It can do it but it is bound to shorten the battery's life.

If your engine does not start promptly when you operate your ignition switch, make sure your carburetor mixture is rich enough before using your starter again.

In cold weather if your engine doesn't start promptly see whether it is being sufficiently "primed."

If your battery is to stand idle with your car out of commission for a month or more at a time, take it out of the car and leave it with a service station to be cared for.

If your lights are dim or there are any other indications that your battery is "run down," it may be due to the fact that you are running the car too long to keep the battery charged, or the generator may not be charging properly, or a wire "short circuited."

If you cannot easily locate the trouble, go to a service station and have an inspection made.

CONSERVATION IN TIRES MEANS NEW ONES

Keeping Up Old "Shoes" Not an Economical Method

Shabby tires on a good looking car! Yet stand on any street corner today and count the number of patched-up, dilapidated tires which are being used to the last mile. The cost of keeping these tires running for a few thousand miles would nearly pay for new ones.

Mileage such as this comes upon. Tire conservation does not mean picking up a decrepit tire and putting it back into service at a big repair cost just to save a little rubber left in the tread. It means taking care of the tire from the first so that it will be able to deliver all the mileage built into it by the maker.

When your tires are so far worn that they are soon to blow, such a course means sacrifice of the inner tube as well.

Cheap, makeshift patches, boots and temporary repairs of all kinds are now being called into use, as never before, separation of fabric piles has already begun, cannot give the freedom from tire trouble on which the pleasure in motoring so largely depends.

To fully enjoy the thrill and sport of winter driving the motorist should look well to his tire equipment. Good tires and these of standard make are the best insurance against the roadside emergency on frosty winter nights.

CHANDLER HAS A "SIX" No Radical Changes Over Last Year's Model

Chandler Six, well known in the eighth year of its production, appears in Space 31 at the show with no radical change of chassis, although the engineering and experimental departments of the great factory at Cleveland have been working overtime and placing in dynamometer and road tests the results of their research refinements.

Among the more recent refinements are the combination of inlet and manifold, so that heating is uniform throughout the whole length, giving uniform combustion in each cylinder.

QUALITY AUTOMOTIVE CHEMICALS IN THE MOST BEAUTIFUL CONTAINERS ON THE MARKET

HARCO Potash Oil Auto Soap
Vegetable Oil Hard Auto Soap
Vegetable 4 in 1 Hard Auto Soap
Transmission Compound
Cup and Motor Grease
Auto and Furniture Polish

HARCO Rapid Repair Enamel
Gasket Shellac
Radiator Cement (liquid)
Radiator Cement (powder)
Leather and Cushion Dressing
Mohair Top Dressing
White & Black Tire Enamel

BUTLER-HARLEY COMPANY
Factory and Offices : 33d and Master Sts., Philadelphia

NEW-LEXINGTON CARS Latest Addition to Line Being Called Revolutionary Car

The Lexington is now produced in two series, their latest addition being an absolutely new creation called the Revolutionary Car, which, while in the making and testing for more than a year, has been on the market only a few weeks. It is the claim to have made a great advance step.

It is a larger car than previous models, having 128-inch wheelbase instead of 122-inch. But the big feature is the new Anstad motor, the creation of John C. Moore, chief engineer of the factory, who feels this is his most notable engineering achievement.

It is a six-cylinder motor, cast in one bloc, with removable head and having 3 1/2-inch bore and 4 1/2-inch stroke.

Prices Sharply Reduced ON THE PHILADELPHIA DIAMOND GRID BATTERY

With Philco Retainers. GUARANTEED TWO YEARS An opportunity for every car owner to secure one of these famous batteries

At Practically Pre-War Price Walter E. Lanagan Ignition Co. Electric Systems Installed and Repaired 305-7-9 N. Fifteenth St. Philadelphia

Goodrich Automotive Products Goodrich-Lenhardt Mfg. Co. Hamburg, Pa. MOTOR TESTING VALVE

Every pulsation of your motor—the very heart of the car—is distinctly heard when the Goodrich Testing Valve is opened.

No owner should drive his car out of the garage before "opening up" the motor to learn if all cylinders are working properly.

The bell-mouth opening of the GOODRICH MOTOR-TESTING VALVE allows for ample expansion of the gases, relieves the motor of all back pressure and greatly intensifies the sound of the explosion. The Goodrich Valve is sold complete with pedal, cable and pulley.

PRICES IN UNITED STATES Special Ford Outfit and all 1 1/2" x 2 1/2" \$3.50 2 1/2" x 2 1/2" 5.00 1 1/2" x 2" inclusive 4.00 3" x 3" 5.75 2 1/2" x 2 1/2" 4.50 3 1/2" x 3 1/2" 10.00 Made in 1/4-inch sizes

Ask Your Dealer for An Old Ironsides Timer

When you install a Goodrich Old Ironsides Timer on your Ford you can forget your timer troubles once and for all. You not only get a uniform, fat, hot spark from the clean contact points but you also save gasoline and get more power.

Just remember that Old Ironsides is a timer to oil and the hardened special metal contact points do not wear away. The brush of special hardened metal makes a lasting contact that is free from dirt or oil and you get a uniform spark, true all speeds.

Ask your necessary dealer for information about the Goodrich Old Ironsides Timer. THESE JOBBERS CARRY OUR PRODUCTS Philadelphia Gaul, Derr & Shearer Co. Standard Supply & Equip. Co. Berrudin Rubber Co. George W. Nock Co., Inc. J. H. McCullough & Son Supplee Biddle Hardware Co. H. C. Roberts Elec. Sup. Co. Manufacturers' Supply Co. Cahall Motors Supply Co. F. Hersh Hardware Co.—Allentown, Pa. General Auto Supply Co.—Lancaster, Pa.

Gasoline—the vital factor in truck-fleet operation

The greater the distribution of commodities through the agency of the motor truck or commercial delivery car, the more vital is the need for an assured supply of the fuel upon which its operation depends.

Consider, for example, the truck fleets which distribute the city's supply of meats or groceries from the wholesale warehouses; coal for the thousands of homes; merchandise from the great department stores; express parcels from the railway depots. Without gasoline they would be helpless.

That is, why truck fleet owners assure themselves in advance of their year's supply of gasoline. The big majority of them "sign up" with The Atlantic Refining Company. They take into consideration Atlantic responsibility—the ability of one of the world's largest refiners of petroleum products to assure them clean, powerful, uniform gasoline the year 'round.

They count upon the Atlantic reputation and equipment for service; and upon the fact that Atlantic is subject to none of the dangers of interrupted supply that may result from congested transportation. Atlantic is delivered direct from Atlantic refineries which are located right here and receive the crude oils by pipe lines direct from the wells.

ATLANTIC GASOLINE Puts Pep in Your Motor THE ATLANTIC REFINING COMPANY Philadelphia

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The MARTIN-PARRY CORPORATION is the largest manufacturer of Commercial Truck Bodies in the World. A continuous, healthy growth over a long period of years such as can come only from superior quality, constantly maintained, and exceptional values uniformly delivered.

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