

CAR OUTPUT IN '20 BIG AS LAST YEAR

Production Manager of Auto Firm Makes Statement.

EXPORTS NOW ARE SMALL

Production Problem of Past Years Giving Way to Problem of Sales.

DETROIT, Mich., March 12.—In view of more or less pessimistic rumors which have been floating around Detroit for the past week or so, a statement by the production manager of one of the largest automobile plants in the country is interesting.

It is customary for seekers after information to approach the sales manager. As a rule this efficient official is a firm believer in the theory of optimism. This description, however, cannot be applied to the production manager. He is a cold-blooded proposition, entirely lacking in imagination. By being too visionary, the production manager could easily overload his plant with inventory.

Production Less Than 1920.

"Figure production in the automobile industry for 1921 on a basis of 60 per cent of what it was in 1920," he said, in response to a question. "If it does not exceed 60 per cent, do not be surprised. If it touches 75 per cent then consider a miracle performed. This is not pessimism nor is it false optimism. It is what we should expect. We are facing a sales problem after almost 20 years of production problems. From that day the motor car became an acceptable and practical machine the energies of the industry have been directed toward perfection and quality in production."

"Aside from what I consider an ordinary sales development with every encouragement possible from a ready market there have been sales problems. The fight has been to supply the increasing demand and cut production costs so that prices might be tempered in accordance with increased competition. Look back over the periods in the development of the sewing machine, farm implements and steel and you will find the same principles as are today influencing the motor industry."

"First there was the period of invention and development. Successful development created demand and production problems followed. For 20 years the development of the automobile industry was a phenomenal one for those days as that of the automobile industry has been to us of this generation. The relation from production problems to sales problems. The industry was overloaded. Plant capacity was greater than demand called for and surplus had to be disposed of abroad. Foreign markets, constantly disturbed tariffs and exchange fluctuations were alternative outlets and closed."

"Sales Problems Recognized." "When production exceeded domestic consumption and foreign markets did not absorb surplus, what happened? There was a glut of cars, overexpanding industries suffered. Weaker concerns fell by the wayside. The stronger companies united, the sales problem was recognized and production problems solved by corporate systems. Today neither farm implements nor the sewing machine industry attracts special attention because of the depression."

"The 20-year period of the motor car industry has been rounded out with production machinery developed to its utmost and with a greater number of different concerns manufacturing cars. Our facilities today are sufficient to more than satisfy domestic demand, and foreign markets are almost closed."

"Reconstruction problems and exchange decline were not the only reasons for the stagnation of the foreign motor car markets, as the very intensive quantity production which we have boasted has been a factor. During the war we manufactured and shipped a vast quantity of automobile products to Europe for war purposes. Trucks and passenger cars were cast loose upon foreign soil after the armistice was signed. They became salvage because it was cheaper to sell them abroad than to ship them home, and better business to sell them than to throw them back upon the American market at lower prices than manufacturers in these markets could sell their own products."

"Two things of interest to American manufacturers resulted from this procedure. A large demand undoubtedly existed, a portion of which was satisfied by these sales, and antagonism toward American manufacturers by makers of French and English cars doubtless was intensified by the low prices received. There was, however, and still is a very satisfactory demand for approved American cars throughout the world."

"Slump in Exports." "Conditions of exchange and actual governmental and banking opposition, to finances in Europe, led us into various countries, together with the world-wide slump in business, has created a condition of extreme stagnation in automobile exports for the last six months. This condition is more or less temporary and I am sure you will see a revival of export business. No one can safely become a prophet as to the time that this will take. It is a fact that the markets of the world are at present overstocked with automobiles. Conservative judgment would indicate an early satisfactory percentage of exports to be had during the current year."

"Take this company as an illustration. In 1920 we had a manufacturing program of about 2000 cars a month and actually produced and sold more than 80 per cent. The falling off in production all occurred in the last 30 days of the year. Of this the foreign market absorbed something more than 25 per cent. Adhering to our policy of conservatism, we shall base our output on about 60 per cent of last year. Should the foreign markets improve more rapidly than now seems likely his percentage probably will be increased."

THIS WEEK'S AUTO QUIZ

This department is designed to aid motorists by asking and then answering in simple form questions prepared by experts. Questions asked one week are answered in the next week's issue.

Answers to last week's questions:

Reason for Fuses. 1. Fuses are necessary to save the wiring of the insulation from being burned through in case of a too heavy charge of electricity. The fuses are usually of a softer metal than the copper wire, therefore more easily melt and break the circuit in case of excessive current. If there were no fuses there would be many troubles from defective or porous insulation or from broken circuits, caused by burned-out wires.

Meaning of Loping. 2. Loping is the speeding up and slowing down irregularly of an engine when the throttle is open or partly open, and is the result of an air leak which exists between the carburetor and cylinders. Examine inlet pipe connections at the engine or carburetor to ascertain if there is a leak. A porous and broken gasket at these connections. Loping is also sometimes caused by too rich a carburetor setting on an engine running in this manner is also said to gallop.

To Test for Porous Insulation. 3. To test if the insulation of high tension wires leading to spark plugs is porous, hold the part of the wire which you think is damaged against some metal part of the car. If the insulation leaks, the high tension current will jump through to the metal against which it is held. This should be done while the engine is running. Misfiring at the plug to which that particular wire is connected will result. A short circuit in the high tension winding of the magneto or coil will give a weak spark.

First American Auto Race. 4. The first race between automobiles in America was held in Chicago in 1895. The length of the race was 54 miles and six cars participated. Four of these were gasoline cars and the remaining two electric. A gasoline car guided by Charles E. Duryea was the winner.

Flexible Engine Explained. 5. A flexible engine is one which will idle down to a very low speed on high gear and from that speed will have a smooth, quick pickup when the throttle is suddenly opened. It is an engine which will go slow or fast and will respond to every impulse of the driver. To have an engine flexible the carburetor needle valve, which controls the gasoline spray, must be adjusted to a nicety and the air inlet valve must be set so that it will feed sufficient air to the carburetor for continuous high speed. Flexibility is almost entirely due to proper carburetor adjustment.

Left and Right Sides of Car. 6. To determine the left or right side of the car always face the same direction in which the car is headed. This is contrary to the belief of some that left and right sides are determined by standing in front of the car and looking towards it.

To Remedy Cylinder Squeak. 7. The simplest method of remedying a squeak within a cylinder is to introduce oil through the spark plug openings or relief cock. Sometimes the engine is fed extra oil through the carburetor. No matter how the oil is fed, a cylinder which squeaks must have oil immediately, as a squeak is an indication of dry rings, piston and cylinder wall. Do not add more oil to the crank case when only one or two cylinders are dry, as it merely means excessive oil being burned in the other cylinders.

Substitute for Pipe Wrench. 8. If work must be done on a round piece of metal, such as a stud or shaft and no pipe wrench is available, a good substitute is a pair of heavy flat files, around the wide ends of which is passed a loop of strong wire. The piece can be grasped between the files by holding together the loose ends. A remarkable grip on the metal can thus be obtained.

Electric Consumption by Headlights. 9. The average pair of headlights consume about five amperes of electricity from the storage battery.

Reasons for Timer Trouble. 10. The usual timer trouble causing irregular firing of an engine is defective contact points or improper movement of the interrupter. Sometimes the small arm bearing one of the points which opens and closes the electric circuit becomes dry at its hinging point and will not work freely or fast enough, and sometimes sticks altogether in the open position.

This Week's Questions.

1. What will sometimes cause the beam from a headlight to be thrown out of focus with the beam of the other lamp? 2. Where are the common sources of leakage of oil in an engine? 3. Why is the usual method of grounding parts of the electric system employed? 4. What precaution should be taken in caring for the storage battery? 5. What common trouble seldom though often causes pre-ignition in an engine? 6. What is a simple preparation for polishing tarnished brass? 7. What are the correct and incorrect ways of regrinding valves and what will result in the grinding? 8. How is the consistency of lubricating grease tested? 9. What cooling system trouble not generally known will cause overheating in an engine? 10. Why should you not get within direct range of the exhaust pipe of your car while the motor is running inside of a small private garage and why should not persons remain within the garage when its doors are closed? (Copyright, 1921, Thompson Feature Service.)

FRENCH PATROL HIGHWAYS

REPAIRS ARE MADE AS SOON AS NEED ARISES.

SAN DIEGO TO HAVE BIG SHOW

Southern California Invited to Participate in Event.

SAN DIEGO, March 12.—Not only will members of the Los Angeles Motor Car Dealers' association be special guests at the forthcoming San Diego auto show in Balboa park, which opens March 26, but automobile dealers and accessory men from Long Beach, Santa Ana, Pomona and San Gabriel valley will lend their attendance to help swing the southern motor exposition to success.

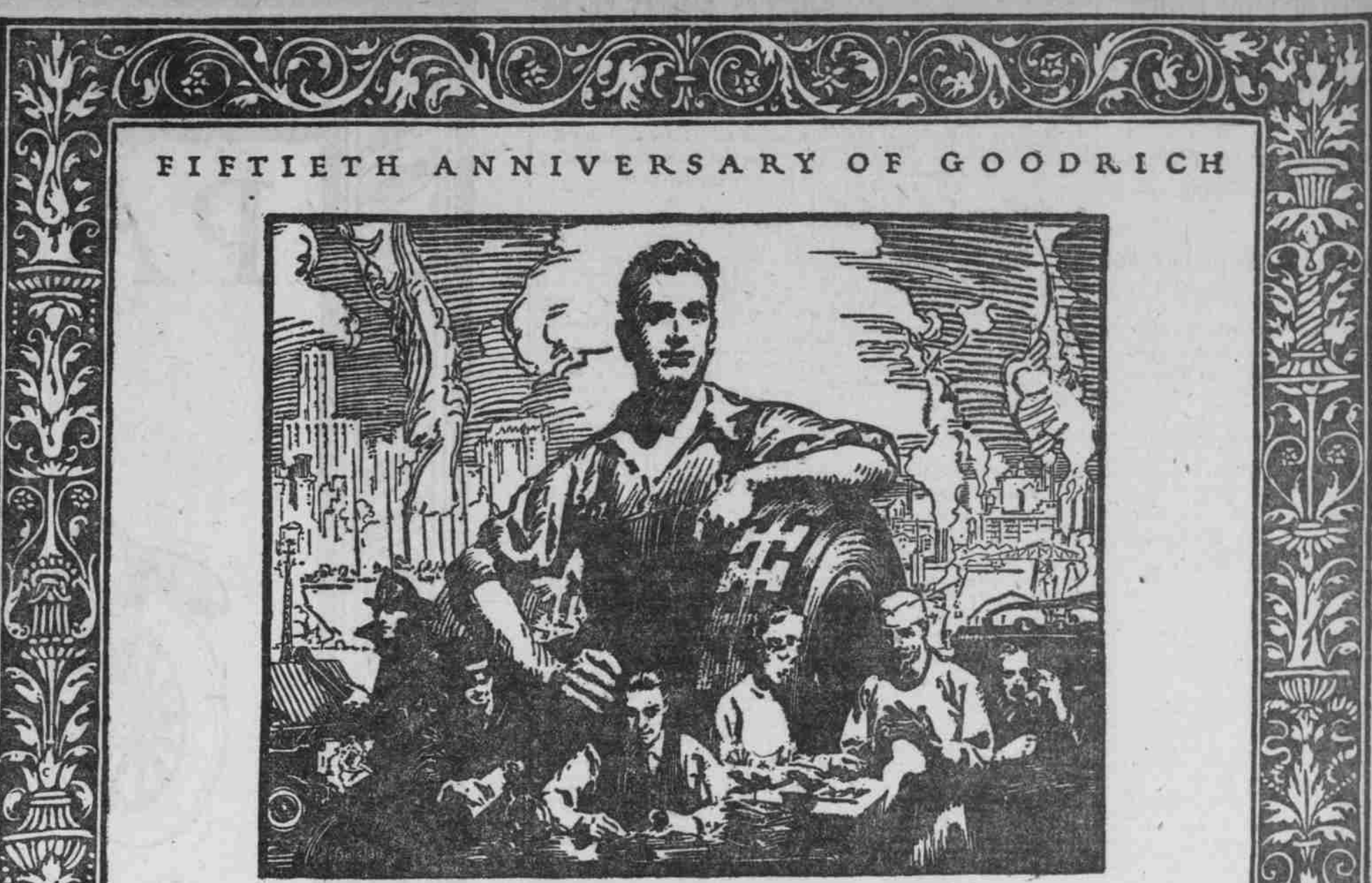
Former Boss Salesman to Sell Harry C. Stutz New Car.

George V. Adams, former boss salesman of the C. L. Boss Automobile company, George V. Adams last week joined the sales force of the Pepp Motor Car company, distributors for the H. C. S. Adams brought fame to the Essex and Hudson cars during his career with Boss through the number of runs of various kinds which he had with the two cars. He acted as a public relations director for the Essex and in this connection pulled off the Astoria run in 1919, which is still remembered. At a time when only about 30 miles of the road from this city was paved he drove an Essex over the 106 miles in 2 hours and 21 minutes, a record which still stands. Adams also made a run to Newport and return in 15 hours in 1917 and put a Maxwell through to Seattle and return by the inside route in 21 hours. Adams held a number of sales records with the Boss organization, his greatest record having been the sale of 27 cars, including 22 new ones, in one month.

New Gas Stations in France.

Government Expects to Take Hand in Dispensing Auto Fuel.

Gas stations will soon be seen all over France, if the plans of the minister of public works of that country are carried out. Instead of being private enterprises, however, the proposed stations will be owned and operated by the French government. Government engineers are already working on the project and drawing up plans. The new system is expected to bring relief in comfort and expense to the automobile tourists of France. One still buys gasoline in gallon tins in France, which can find it and has the price—12, 15 or 18 francs for five litres, a little more than a gallon. Convenience and a fixed price are expected to result from the use of the government gasoline depots. There is no less than 200,000 motor mechanics in the United States.



FIFTIETH ANNIVERSARY OF GOODRICH

"Best in the Long Run" is more than a phrase—it is a principle inseparably connected with the name of Goodrich. It typifies the ideal of service that governs the manufacture of every Goodrich product.

THE REAL MEANING OF "BEST IN THE LONG RUN"

THE MOTTO of Goodrich, from the very first day the company started—fifty years ago—was, "Let us make goods destined for service." The thought of service dominated the work of the organization, for it was rightly realized that only upon the service the products of the company rendered to their users could an enduring concern be built.

into the dependability of Goodrich rubber products of all kinds. It is not just a catch phrase. It is a plain statement of fact. It is really a mirroring of the confidence placed in Goodrich products by their users. In five words it expresses the ideals, the policies, the principles of the institution. It means the "long run" of good faith and good will—the steady building up of confidence in the minds of customers—which is the greatest asset a manufacturer can have.

Eventually this principle was crystallized into the five words which are now so well and widely known as the Goodrich slogan—"Best in the Long Run." It is almost as old as the history of tires for it grew out of the performance of Goodrich Tires on bicycles. And it grew

Quality and service—that is how Goodrich translates this slogan into terms of longest average wear, utmost dependability and known value in all that it produces. It must be "Best in the Long Run."

THE B. F. GOODRICH COMPANY · AKRON, OHIO

MAKERS OF THE SILVERTOWN CORD TIRE

TIRE MAKERS CONFIDENT

EARLY RETURN TO NORMAL CONDITIONS EXPECTED.

Statement of Akron, O., Company Indicates Outlook for Future Generally is Bright.

AKRON, O., March 12.—This city, which was one of the first cities in the country to sense the approaching period of business depression last summer and began reducing production accordingly, will be one of the first to feel the effects of a return to normal conditions.

Business in the tire industry already is showing improvement. Each week sees a quickening of the business pulse. Orders for tires are being received in larger numbers. The open winter has been a godsend to the industry, creating a demand for tires greater than in any other year. The effect of the demand is now becoming apparent.

Rubber manufacturers here believe that the future growth of the rubber industry will be gradual and healthy. They expect no sudden leap back into the "peak" activity of a year ago, nor will there be "over night" expansions which brought thousands of laborers to this city as in the past. In announcing that the number of employees would undoubtedly be materially increased within the next three months, tire company executives emphasize the point that only a few men will be taken back first.

In commenting of the prospects for the future the B. F. Goodrich Rubber company issued the following statement: "Each week is showing improvement over the week before. However, it will be before a normal status returns is merely a matter of conjecture. We confidently believe that the last six months of the year will be normal. In considering what the future has

BRAKES PREVENT WRECKS

IMPROVED MEANS OF STOPPING CARS APPROVED.

Unique System of Applying Columns of Oil Under Pressure Is One Used.

Ever since automobiles came into general use engineers and manufacturers have been working to make them safer in operation. Non-skid tires and tire chains, improved bumpers, non-splintering windshields, more practical headlights and various dimming devices—all have contributed to the prevention of accidents.

But the brakes are, perhaps, most important of all. On the earliest cars a single transmission brake was used, but as chassis were lengthened and more powerful engines installed a set of two additional emergency brakes was mounted on the rear wheels. The general adoption of an equalizer to distribute the braking strain evenly between the two wheels was a marked improvement. About this time most of the manufacturers

ELGIN DEALER DRIVES SOUTH

Show at San Francisco.

Lee L. Gilbert, Elgin dealer in Salem, was in Portland last week visiting at the Welles Motor company, Elgin distributors here, after an auto trip of three weeks to San Francisco, Los Angeles and other California points. After a couple of days here Gilbert returned to Salem.

The Elgin dealer made the trip to Los Angeles and back in his motor car, stopping a short time at San Francisco to attend the San Francisco auto show. This event he characterized as the greatest auto show he has ever seen, and his experience includes a number of the New York and Chicago events. The trip to California and return was made without great difficulty, Gilbert said, although some bad mud and rough road were encountered in southern Oregon and northern California. At Smith hill, Gilbert said, the state highway department had three teams on hand helping motorists, but he was able to go through on his own power. Of course Gilbert drove an Elgin.

REPLACING RADIATOR HOSE.

When the outlet and inlet of the water system are close together, it is often difficult to get the rubber hose that connects the two in place. By sinking the hose, and holding it in the middle, the two ends will slip over rather easily. A ventilated spark plug is provided with a ball check valve through which air is drawn to keep the center electrode free from carbon and oil.

abandoned the transmission brake in favor of a double set of rear wheel brakes—one set for service and the other for emergency.

For many years the only further improvements in brakes were minor refinements, such as larger drums, better lining, simpler linkage, etc. A recent development has been a brake of the hydraulically operated type. A four-wheeled system of service brakes was recently designed for Fred S. Duesenberg, the racing car designer, and embodied in the new Duesenberg straight eight, a car with a single block engine comprising eight cylinders in a row, and manufactured by the Duesenberg Automobile & Motors Co., Inc., of Indianapolis, Ind.

These brakes are foot-actuated, in accordance with the regular practice, but the motion of the brake pedal, instead of being imparted to the brakes by a direct mechanical linkage, is transmitted by columns of oil under pressure.

When the brake pedal is pressed down, oil is forced from the master cylinder through the pipe lines to all four brake cylinders, and the brake sectors are applied to the internal surface of the brake drums with great force. As soon as the pressure on the brakes is released the return springs withdraw the sectors from the drum. This hydraulic system, for the transmission of brake actuating pressure not only does away with a multitude of links and levers, but also equally distributes the braking work between the four brakes, it is claimed.

Lifting Valves by a Magnet.

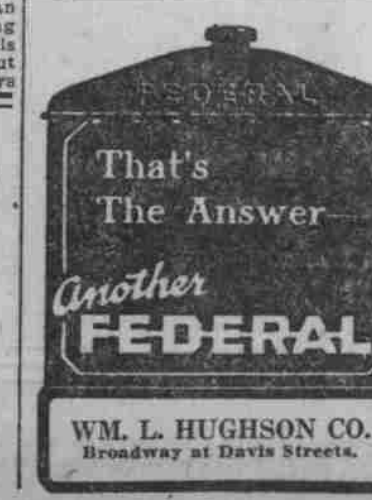
It is possible to use a borehole magnet to lift the valves of a Lehead engine instead of the usual bent wire, when grinding valves. This saves a considerable amount of time and annoyance. Homemade Cold Chisel. By taking an old Ford driveshaft and flattening the rear end to form a chisel edge an ingenious car owner made an extremely effective cold chisel for cutting off the head of rivets located in inaccessible places.

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