

1919 MOTOR COST \$10,000,000,000

Vast Sum Shows How Important in Nation's Economic Life Automobile Is.

More than 5,500,000 motor cars of all descriptions in use in the United States were registered in the several commonwealths in the last year. As may be inferred from this figure, motor cars have been the means of building up a vast industry. According to a report recently made public there are 210 manufacturers of passenger automobiles and 272 makers of trucks in 32 States, with a capital of \$738,000,000 and employing 280,000 workers at the annual wage of \$275,000,000.

The report also shows that there are 1,050 manufacturers of bodies, parts and accessories, having capital of \$338,000,000, employing 220,000 workers and paying \$238,000,000 annually in wages; that about 27,800 automobile dealers, located in nearly every town, have a capital investment of \$114,000,000 and employ 230,300 persons, and that up to June 1 64,824 passenger cars and 15,977 trucks valued at \$113,411,000 had been purchased.

8 Per Cent. Foreign Cars. These figures speak well for the soundness of the American product, especially when we remember that it is but a few years since our export trade was insignificant, while a large number of the motor cars in use at home were of foreign make. As a matter of fact statistics 94 per cent of the cars used in this country are of American make and if a comparison were to be made upon values this percentage would be still higher, for it can be safely computed that the motor cars owned in the United States aggregate a present value of nearly \$5,000,000,000, an estimate placed on a basis of rating 75 per cent of the total number registered last year at \$1,000 each and the remaining quarter or 25 per cent at \$2,000 each, both figures being exceedingly conservative, as the price of motor cars varies from as low as \$400 to as high as \$6,000 for the high powered luxury type.

The statistics further show that \$917,470,938 was spent upon the purchase of about 1,728,184 new cars by American motorists last year, and to this sum is yet to be added the value of the accessories, the supply of which forms a very substantial branch of the motor car trade.

But the annual expenditure for new machines, large as it is, is not all the expense, as the cost of running is heavy, and it is estimated that the total sum being built up, namely, the manufacturing, which is becoming almost as large as the motor car building trade itself. Last year 13,000,000 were made, the value of which is placed at \$150,000,000, \$80,000,000 for better roads.

Next to the cost of tires in that of gasoline and lubricating oils, which are among the heaviest in the motorist's expenditures. Besides, the cost of repairs, and the cost of the car itself, which amounts to many millions, which, adding to this the sum of the annual registration and license fees (reaching \$25,000,000 so far this year) would bring the total expenditure to a sum exceeding \$25,000,000. Statistics reported by the United States Bureau of Roads indicate that approximately \$40,000,000 was expended for highway improvement last year by several States, and largely for the benefit of the motorists.

While many owners keep their machines in stables converted to a new use, a large number of motor vehicles are stored in public garages, numbering 25,300, or in buildings especially rented for that purpose, and the cost of this service must aggregate a large sum, although perhaps the heaviest expense of all is in looking after the driving and care of the cars, the need of which has opened a new calling of a vast extent.

The total number of professional drivers licensed in this country during 1918 reached nearly 175,000, and since that time their number has increased two fold. If the wages of this number were fixed at the rate of \$15 per week and the compensation of others employed about the car were added the total would reach upward of \$5,000,000 annually, and thus the running expenses of the motorist coupled with the purchase price and incidentals would reach the enormous aggregate of billions of dollars.

Other Huge Items. But these figures cover only the direct expenditures upon cars and their operation and do not take into account distribution and sales costs and the money spent indirectly in connection with motoring, such as the cost of suitable clothing, hotel and travelling expenses while touring.

At least half of the cost of repair and maintenance goes to labor, while even such items as garage expenses, registration and license fees and insurance also mean employment of laborers and helpers, collectors and clerical staffs. Taking all the expenditures of owners of motor cars, the benefits to the industrial classes must exceed in the aggregate a billion dollars annually. If the average of the wages and salaries of all engaged in the motor trade and other connected industries be taken into consideration as a thousand per centum, it means that upward of 2,000,000 persons obtain their employment by that industry, and that something like 5,000,000 of the population are directly or indirectly supported by the manufacture of motor cars.

Then there remains a very important item of depreciation which, although not one of direct cost to the pocket expenditure, is one, nevertheless, representing a loss of capital and should therefore be included. If this were done it would add another vast sum to the total, so that if these items are considered it is certain that at the present rate of increase the gross expenditure upon all branches of motoring will, before the present year is out, reach the enormous sum of \$10,000,000,000.

BIG BUSINESS REVIVAL.

George Garland is an Optimist Over Outlook. Discussing the general condition of business George Garland of the Garland Automobile Company said: "Automobile sales since the middle of January have been the most satisfactory yet for this season of the year. The exceptionally fine weather has undoubtedly had something to do with it, and there has apparently been some disposition on the part of the public to give themselves up to a more normal seeking of pleasure after a period of strictest denial in their patriotic support of the war."

"The automobile show held this month has had a very beneficial effect not only in the automobile trade but in other kindred lines. A prominent motorboat engine manufacturer told me that he believed the automobile had loosened up things quite generally. "Our local Velle deliveries in February were approximately \$100,000, which does not include advance shipments to agents for spring delivery."

"The average American is returning to his normal life. While he will know that he must buy Liberty bonds, pay his taxes and help feed starving Europe, he is going at it cheerfully and is not going around forever in the old threadbare coat with his trousers bagging at the knees and in his pursuit of happiness for himself, family and friends he is certainly not overlooking the automobile."



The daring automobilists shown in the car are S. H. Kelly, assistant manager, and Nellie Prendergast, advertising manager of the Kaufmann-Stowers Company, local distributors for the Premier.

STRANGE ENGINE TYPES.

How the Aero Magneto Solved Ignition Problem.

The average motorist is familiar with but two types of engines, the vertical type, such as nearly all cars use, and the V type employed in eight and twelve, but he is not aware that half a dozen other shapes and disposition of cylinders are used in airplanes. The plane engine may be of the vertical type, the V type of 90 degrees or 60 degrees or 45 degrees, or it may be of the radial type commonly known as the "star shape."

The Gnome and Le Rhone are typical of the star shaped engines. A most unusual design is the Bugatti sixteen cylinder, in which there are two vertical eight cylinder blocks, each having an independent crankshaft. The shafts are geared together. In addition to this form there is an eighteen cylinder fan-shaped engine in which there are three blocks of six cylinders each. This engine looks like a twelve cylinder automobile engine with another block of six cylinders stuck in between the other two. V types of course are made as eight, twelve and sixteen for airplane use.

Each of these types of engine requires ignition equipment different from the rest, that is a magneto for a radial engine won't do for a fan shaped engine. It is a great tribute to the ignition engineers of America that they were able quickly to produce ignition equipment for all these types. In one

instance in the aero magneto made by the Splifford Electrical Company we have the most remarkable piece of equipment of its kind ever produced, since one instrument and a few extra parts permits of using the instrument on practically any type of engine produced. The basic instrument is an eight cylinder 90 degree type, and by the use of a few quickly changed parts that same instrument may be used on a twelve or a sixteen cylinder engine or a six or an eighteen.

ESSEX "WENT BIG" AT SHOW.

Its Simplicity Pleas'd Many, Says Harry S. Houpt.

In discussing the recent Automobile Show Harry S. Houpt, president of the Hudson Motor Car Company of New York, said the company had done the biggest retail business it had ever known at a show and that the sales ran about equally divided between the famous Hudson Super-Six and the new Essex car, which was displayed for the first time at the show.

"One of the features of the new Essex which appealed most to our customers," said Mr. Houpt, "was the car's ease of operation, simplicity of maintenance and its room and comfort. "In the past automobile development has been toward a cheap, light car with economy and low first cost as its chief



THE appearance of the Liberty invariably arouses admiration.

Everything about the car singles it out from the commonplace.

Fifteen minutes of driving proves that this outer beauty is simply a sign of rare, inner goodness.

You know instinctively and at once that you are in a car of superior quality.

You feel that the car holds its steadiness because of its perfect balance—not because it is weighted to the road.

You feel that you can drive it for hours without a sense of fatigue.

And before that first ride is over, we believe that you will have found several distinct and definite reasons for Liberty preference.

OWEN-MAGNETIC SALES CORPORATION DISTRIBUTORS OF LIBERTY CARS Broadway at 57th Street Telephone Circle 898

LIBERTY SIX

PACKARD'S NOVEL PRICE INSURANCE

Its Price Drops—Every Buyer Since January 1 Gets Refund.

Not since the war ended has anything in the automobile business been done to stabilize conditions so much as the Packard Motor Car Company's recent announcement that it would protect all patrons against a drop in price. Packard's new policy has undoubtedly cleared up the minds of many prospective purchasers who have delayed the purchase of a passenger car or motor truck in their expectancy of a big drop in price—something that present conditions in no way warrant.

While there is no prospect of a drop in passenger car and truck prices no one in the world can forecast with certainty the price movements of the next few months, and the Packard people feel that it is no more than fair to assure the present buyer of a new car or truck that if a reduction becomes possible during 1919 he will share in it. To quote C. R. Norton, general distribution manager: "If at any time during 1919 we should be able to make a price reduction in either cars or trucks or both, this reduction will be made retroactive, and we shall refund to every purchaser of a new Packard car or truck as the case may be between January 1 and December 31, 1919, inclusive, the full amount of the difference between the price he paid and the new price. In case of contracts executed prior to any such price reduction but where vehicles are undelivered at the time of reduction the distributor will rewrite the contracts to conform to the new price."

This is, we believe, the first instance on record of any automobile company guaranteeing that an early buyer will be reimbursed in case of a price reduction.

UNUSUAL USED CAR SALE.

Hudson Motor Car Co. Makes Special Effort.

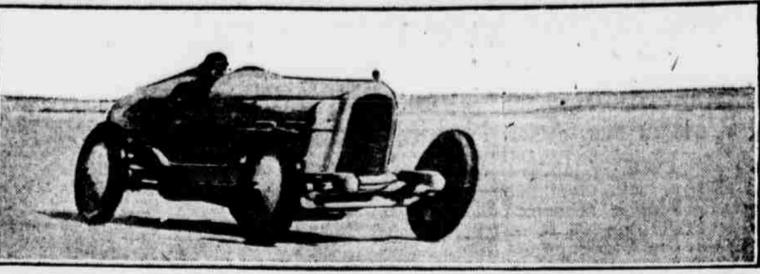
As in the case of new passenger cars, there has been a pronounced demand in the last month for used cars, especially of the type that have been through the paint and repair shops before being placed on the showroom floor. The Hudson Motor Car Company, Inc., of New York, which is usually careful about the condition of used cars which they offer for sale, has found an extraordinary market in the special sale which started a week ago.

The sale is being continued at the Hudson Motor Car showroom, 1530 Broadway, and includes among its attractions a number of seven passenger Hudson touring cars at \$955. For those whose fancy runs to enclosed models there is a choice of sedans, limousines, landaulets and town cars, all in fine shape and mounted on the Super-Six chassis.

"In its construction nothing has been sacrificed to mere appearance, its beauty coming from inherent qualities of fitness of line and contour and from work correctly done."

NEW KEYSTONE BRANCH. The Keystone Tire and Rubber Company announces that arrangements have been completed and in a few days it will open an automobile tire and tube department in the Bloomingdale Bros. store at Fifty-ninth street and Third avenue. The opening date of this department will be duly announced in the newspapers.

De Palma and His Packard Going 149.72 Miles an Hour



New Packard Records

At a meeting of the contest board of the American Automobile Association, held on February 22, the following times made by Italo De Palma driving a Packard special at Daytona, Fla., on February 12, 15 and 17 were allowed and accepted as official records: STRAIGHTAWAY RECORDS, REGARDLESS OF CLASS, NON-STOP

TIRE PRESSURE IN WINTER.

Keep It Same as in Summer, Is Goodrich Co.'s Advice.

"Should I increase the air pressure in my tires in winter?" Tire air pressure should remain the same, winter and summer. This is the advice of the B. F. Goodrich Rubber Company to thousands of American motorists who are in doubt as to the proper inflation to maintain during the cold winter months.

Many car owners labor under a false impression regarding the tire pressure. Regardless of the season, it is impossible to increase the pressure in pneumatic tires sufficiently to injure them. Tires should not be pumped up harder in the winter months. Likewise, pressures should not be reduced in summer, because decrease more friction and naturally to generate heat. Motorists are inclined to make a complicated matter of inflation. While too little pressure is undoubtedly the biggest abuse tires are put to, determining the proper air pressure for tires is really a simple matter.

We Wonder Why

You have to call up Tom Wells now to find Sidney Bowman.

Glenn A. Tisdale is eagerly awaiting the day on which peace is declared.

E. S. Partidge and Fred Titus plan to give Sleepy Hollow club members a great treat during the coming summer.

S. de R. Keim keeps complaining about his niblick being red hot most of the time.

Frank Klerman can't keep away from the picture postal card stands at Atlantic City.

Bill Poertner never knows on Monday whether he is going to spend the rest of the week at Pinhurst, Bayside, Travers Island or Dunwoodie.

Bill Parkinson has quit playing pocket billiards.

"Dunwoodie" McDonald never uses his own umbrella to illustrate a 150 yard approach to the green against a cross wind.

Jack Clark never "came through" with his "Peerless Run Over the Mohawk Trail."

C. D. Studebaker and Jack Eastman already are planning some dastardly trick to "catch a man off second" down on Fred Wagner's farm.

Use the Rip.

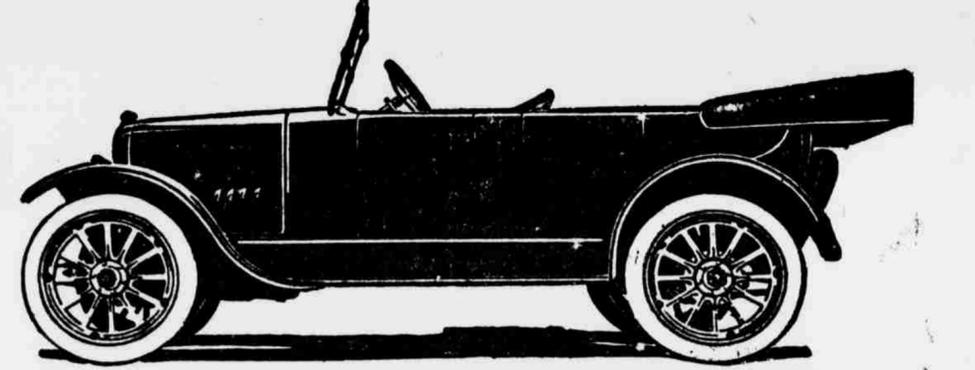
In cases where the failure makes it necessary to come home on the rim, the owner should do just that. Many drivers think that it is better to remove the rim and come in on the felloe. This is a mistake, a damaged rim is cheaper to replace than an injured felloe. As a general thing the rim can be repaired, but the felloe usually has to be replaced after one of these trips.

To Locate the Cotter. A simple and convenient way of finding the hole for the cotter pin is to file a notch in the end of the bolt or stud parallel with the hole. In this way it is easy to bring the notch points to the castellation at each end, when the cotter pin will slip readily into place.

Rusty Rattles. By loosening the front and rear ends of bolts holding the body to the frame rattles and squeaks in doors and body will be practically eliminated by clipping a section of brake lining around each of the loosened bolts. A slit is cut in the brake lining so that it can be passed around the sides of the bolt.



Nine Chances to one the next motor car you see has HYATT ROLLER BEARINGS



BRISCOE

A Car New York Will Welcome Alike for Style, Service and Economy

In the Briscoe—\$885 at the factory—we are able to offer a popular-priced passenger-car which satisfies every motoring desire. We wanted a car that we could confidently back with every effort of our sales organization. Many were offered to us; and we investigated the merits of each.

This means not only prompt service, but lower costs.

The Car Itself. The Briscoe Twenty-four has made a world-wide reputation in the two vital factors of economy and performance.

The gas mileage is astonishing for a car of its power. Twenty-five to thirty miles to the gallon is not unusual. And with the present high cost of gasoline, mileage will be a vital factor in influencing buyers.

Power, Too. We tried out the Briscoe on hills, in sand, in mud—under every conceivable condition of use. We put it through harder tests than you will ever give it. And we found always a reserve of power ready to carry the car triumphantly through every test.

Every Desirable Feature. In beauty of line, in comfort, in roominess, in all the little refinements that make motoring satisfaction, we found the Briscoe dominant.

And so we offer the car to you, confident that if you will subject it to the same thorough and severe tests you will endorse it as thoroughly as we do.

Open House All Week. Come in and get acquainted with the Briscoe. Compare it with your ideal car, and with any others you have seen. We're content to let it sell itself on your own judgment.

The Standing of the Company. Some passenger-car concerns considered thoroughly established were so weakened by war conditions that their survival now is doubtful. Some, on the other hand, were strengthened—and the Briscoe Motor Corporation was a leader among these. Possessed of millions of dollars of resources, it devoted the war period to making its great plants more efficient than ever before. So when these plants were released by the Government they were, we believe, as efficient as any in the world building high-grade cars.

Service to Briscoe Owners. We have had our troubles, in the past, in getting spare or replacement parts promptly on cars which were merely assembled. Weeks might elapse before the factory could get action from the parts maker.

So it was a great pleasure to find that in the 43-acre Briscoe plants, 99% of the car was actually Briscoe-built.

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GARLAND AUTOMOBILE COMPANY Metropolitan Distributor Telephone Columbus 5596 1888 Broadway at 62nd Street