



Hundreds of Farmers' Autos Lined Up on Grounds of Agricultural College.

One Auto For Each 25 Americans by January 1

Remarkable Increase in Number of Cars Owned in This Country Will Soon Bring Total to 3,946,664, Valued at \$2,000,000,000

THIS is a nation of automobile owners. Nothing like the distribution of motor vehicles in this country is to be found in any other part of the inhabited globe. Never before in history has a product, the unit value of which even remotely approached that of the automobile, been sold to nearly so large a proportion of the population. If any argument were needed to clinch the fact of the huge prosperity of these United States it could be found in this one item of national investment; the light-seeking economist would need to search no further. By the first of January, 1917, there will be one automobile in this country for each twenty-five inhabitants. On Jan. 1 of this year there was already one automobile to each forty-four of the population.

It is staggering when one stops to realize the cost of even the most modest motor car. If one puts the average cost of an automobile at \$500, which is considerably lower than the true average, the value of the 2,445,664 cars which the Government census recently announced were registered in the United States in 1916, reaches in the aggregate \$1,222,832,000. This is the sort of a figure that one uses in speaking of national debts or annual appropriations of a first-class power or the cost of many months of the great war. It is quite outside of ordinary comprehension.

But automobile production did not stop in this country when the weary old year laid down his scythe and hour-glass last December. On the contrary, it received a new impetus, and more cars, by an enormous percentage, are being produced and sold this year than ever before. The most sanguine prophets predicted that 1916 would see 1,500,000 cars produced in America. For once these prophets are cloaked with honor in their own country, for that production seems certain to be reached. In a careful compilation of the figures for the first six months of the year, made by The Automobile, our factories were found to have produced 754,902 passenger automobiles. It is not hard to see that with

the speeding up of the production usual in the second half year the 1,500,000 mark is sure to be attained.

When these 1,500,000 cars are added to those in operation on Jan. 1 last, it will be seen that at least 3,945,664 automobiles will be owned in the United States, or one to every 25.34 inhabitants. This total will represent an investment of \$2,000,000,000 in round figures, based on the \$500 a car unit, which is certainly far too low.

Such an enormous distribution of a product, which less than a decade ago was considered a luxury, demands an explanation. It bristles with interesting economic questions on all sides. But the first insistent query is: "What has made such a thing possible; wherein lies this modern magic?" The technical and rather puzzling answer to this question is quantity production.

"What," you say, "you answer the query of what has made such quantity possible by saying, 'Quantity production'!"

Precisely. Because quantity production, applied to the automobile industry with an intensity and a thoroughness never before equaled on approximately such a scale, has in turn made possible a constant and important reduction in the prices at which cars are sold. It has put the automobile into the hands of every man, and, as if with the waving of a magician's wand, has made of the man in the street a motorist. Let no man say after this decade that the age of witchcraft is dead.

Ten years ago you could not buy a serviceable automobile for less than \$2,000; five years ago your choice below \$1,000 was limited—and strictly limited. Today there are at least fourteen standard makes of car, from any one of which you can expect more consistent service than from the expensive machine of a dozen years ago, which sell for less than \$700. Many of these are priced at much less than that amount. Indeed, the great majority come substantially below that mark. The motor car has become literally less costly than a pair of decent horses at first price and, of

course, much less expensive to maintain from all points of view. The industry has been democratized.

Argue as you will; say that his rivals would have brought it about if he had not, or let your irrelevant preparedness enthusiasm scorn his pacifism all you wish—the man who is responsible for all this and deserves the credit for it is Henry Ford. He it was who conceived the idea of the car for the masses, and it is this fundamental conception that has brought him enormous profits and world-wide fame. He had the foresight to apply the chewing gum principle of small unit profit and huge sale to the automobile, and had it not been for him and his stubborn maintenance of his policy the distribution of cars in this country still might easily have been confined to the idle rich.

Year by year this wizard of the automobile industry has cut the price of his car until a point has been reached when the irreverent predict that one will soon be given away with a pound of tea. The latest reduction was announced last week. It brings the touring model down to \$360, free on board, Detroit, and the runabout to \$315. Of course, such a figure for a practical and satisfactory motor car has only been accomplished by quantity production carried to the Nth power. The same methods in theory and practice have been applied to the building of a machine capable of carrying five persons anywhere an automobile will go, that might be used in making a safety razor or a clothes wringer, or any other small and common article of commerce.

And the methods of the mammoth plant at Highland Park, Mich., have necessarily been imitated in some degree by many, if not most, other makers of automobiles. It is not meant that the exact factory practice is followed, or that the results are the same as far as the individual machine goes. But other makers have been forced to think in terms of scores and hundreds of cars a day and have thus, willy-nilly, been led to produce vehicles which, however they might differ from the "flivver" in design or appearance, yet approximated it in price.

That the scaling down of cost has been widespread—in spite of the fact that raw materials of which automobiles are made were never before so high as they are at present or so difficult to obtain, and in spite of the further fact that labor is also exceedingly high and uncertain—may be seen by a glance at the prices recently announced for some of the

models for 1917. In many cases the makes named below can be had in other models at varying prices, but unless otherwise noted the price given is for the touring car model and f. o. b. factory. Here are fourteen cars below the \$700 mark:

Argo (two passenger)	\$435
Briscoe	625
Buick (four cylinder).....	665
Chevrolet	530
Dart	665
Ford	360
Maxwell	545
Metz	600
Munro (two passenger).....	495
Overland	635
Martin-Palmer	685
Regal	650
Saxon (two passenger)	365
Remington	635

Of course, there is a wide difference in the equipment of these cars at their several prices. Some have complete equipment, including all the usual accessories, together with electric starting and lighting outfits. Others do not include one or both of these last-named addenda to the modern automobile. But all are ready for the road in all essential particulars and can be driven with much comfort and success without further cost than that noted, save the freight charges and the State license fee. Obviously, motoring for the masses is here.

When it is realized that \$500 is certainly a conservative figure for the cost of a good team of horses, the comparative inexpensiveness of the modern small car is readily appreciated. Then when one begins to estimate depreciation, feed, shoeing, care, and so forth for the team as against the corresponding items for the car it becomes plain why automobiles in apparently limitless quantities can be not merely made but sold. The price of some of the cars listed above works out to about \$20 for each horse power. If you had told a man ten years ago that you would produce a car in that category he would have laughed you to scorn or sent for the nearest policeman.

No one can tell what the ultimate absorbing power of the country for automobiles may be, for their purchase has already exceeded the rate predicted but a few years ago by so much as to make further prophecies hazardous. However, there are men in the industry who have their cars very close to the ground and whose predictions in the past have been borne out in all their optimism. These men say that the country can use 12,000,000 automobiles. This would mean, at the present number of inhabi-

kants, one car to every family and is predicted upon the practically universal use of motor cars by the farmers of the land.

The Government figures show plainly that farmers in some of the great agricultural States are taking kindly to the "buzz wagon." Iowa, for example, had the highest percentage of automobile owners in the country last year, with one car for every sixteen inhabitants. Alabama was the least thoroughly motorized State, with only one car to every 200 of population.

The motorists, in addition to the indirect revenue which they bring to the country, are the source of a considerable sum in direct taxation. Thus the Government reports that the total fees paid by motorists last year amounted to \$18,245,713. Of this amount, according to the figures of the Department of Agriculture, \$16,213,387 was spent for the building and maintenance of State and county roads. The total registration—probably rather less than the total number of cars actually in use, as some States do not require annual registration—of 2,445,664 for 1916 compares with a registration of but 48,000 in 1906. For a ten-year-old the industry has thrived rather nicely.

In the course of its recent investigation The Automobile unearthed some astonishing and romantic statistics of this young giant among industries. For example, although one manufacturer turned out from Jan. 1 to July 1 no less than \$119,000,000 worth of cars, he did not have a monopoly of the field as one might reasonably expect. Quite the contrary; there were ninety-eight other companies making pleasure automobiles during this period, all of them seemingly prosperous and each with a definite schedule of production. During the year of 1915 a total of 892,618 cars was produced in the United States, but 85 per cent. of that total had been made this year, when the half-way point was passed on July 1. The total retail value of the

passenger cars made in 1915 was \$555,856,450. For the first half of 1916 cars worth \$481,100,000 had been produced.

One section of the country, broadly speaking, has taken this great industry for its own. One State, indeed, may be said to be the Alpha and Omega of automobile making. From January to July 79 per cent. of the country's automobiles, or 595,153 cars, were made in Michigan. Ohio and Indiana follow in order of production, and the three States together made in these six months 96 per cent. of the total for the country. The Wolverine State believes in quantity production as applied to each factory evidently, for in spite of the fact that it made 79 per cent. of the cars it contains but twenty-seven of the ninety-nine motor car factories.

When it comes to a question of individual companies Ford, of course, leads the production list. The Highland Park plant made 298,000 cars in the first six months of this year, or an average of some 1,900 cars each working day. Second on the list in numbers produced comes the Willys-Overland Company of Toledo, Ohio, which made 94,477 in the six months. Third is Maxwell with 40,000 odd. Following along closely are Chevrolet, Buick, Dodge, and Studebaker, with Chalmers, Hudson, and Saxon occupying the next places in the matter of quantity. It is not hard to imagine the transportation problems connected with production figures such as these, or to account for the shortage in freight cars when such bulky articles as automobiles have to be moved in quantities of this kind.

As to the market for this product, it is, of course, country-wide and among all classes. But the farmer is perhaps the most eagerly sought automobile "prospect."

"The farmer is all important as a car buyer," says the statistical review already quoted. "In Oklahoma, the increase of cars for the year of 1916 as compared with 1915, in so far as figures

can be compiled at the present time, is 250 per cent. In Mississippi it is 195 per cent., in Louisiana 210 per cent., and in Idaho 117 per cent. In the great farming State of Iowa there is one car to every fourteen persons, in Nebraska one to every twenty persons, and throughout the other big farming States in the corn and wheat belts similar conditions prevail. The country fair of today is incomplete without its attending automobile exhibits. And unlike the visitors at many of the pretentious automobile shows held, the farmers actually come to buy as well as to look."

During the six months ended July 1 more than 33,000 passenger automobiles have been exported, with a total value of more than \$24,000,000. Thus only about 4½ per cent. of the country's production is shipped abroad.

"During the first half of 1916," the review continues, "the number of passenger cars made per month in the United States averaged 125,187, with an average monthly exportation of 5,645. Uncle Sam probably will always continue to be his own best customer, but the markets of the world are open to him, and the probabilities are that the close of the European conflict will open large markets which are now inaccessible. It is, of course, natural to assume that the home industries of Europe will be protected, but if conditions are as they might be expected to be, the market for automobiles will be larger than the recreated European factories can handle."

But no matter how we may expand our export trade—and it is apparently certain to have a great expansion, especially with our neighbors to the South—it can never be more than a drop in the bucket as compared with the huge home consumption of automobiles. Therefore, Mr. Everyday Citizen, if you would be in the swim prepare to give up the price of a short vacation—and a nearby one at that—and add yourself to the host that rides on rubber tires. Go

down into the market place contentedly driving your little touring car or runabout for which you have paid less than the price of an autumn outfit of becoming raiment, and find yourself one of the hoi polloi on wheels. You can own a nice car for less than it costs you to go to Europe comfortably, and you probably don't want to go to Europe now anyway. So be one of the throng and ride.

And you need not be so tremendously surprised to rub your eyes one of these fine mornings, just a handful of years away, and find that the humor of the comic weekly artist has been brought almost literally to commonplace experience; that everywhere you look motor cars big and little are reducing exercise to a lost art and performing all the business of life. It will not be long before it is as natural for a family to keep an automobile as to have a telephone, nor will a man any longer be regarded as at least a semi-plutocrat because he is propelled from place to place by gasoline rather than the power of his own two legs.

Were Charles Darwin alive he might even be tempted to foresee an approaching epoch in the march of evolution wherein man would have one of those reversions which so please the scientific mind to observe, and become no longer biped but quadruped once more; with the vital difference that instead of running upon all fours he used all four extremities to govern that which propelled him in a strange manner whithersoever he would go.

It may be that the day is still far off when every man shall ride in his own car, but when one realizes that when the New Year comes in one person in every twenty-five in this broad land, or four per cent. of the population, including men, women, and children, will be able to do that very thing, it is evidently the part of wisdom to refrain from limiting the absorptive quality for automobiles of the American sponge.