Retread Tires Shown at Sterling Tire Exhibits

The Miller Rubber Company introduced a new band for retreading worn out tires some time ago. Formed after mechanical ideas it has the most effective principle and design against skidding. A series of "cogs" divided by a narrow strip of soft rubber in the center of the band help to make this nonskid effect a truly remarkable one. It became immediately popular especially among repairmen as they found that the partially cured rubber on the breaker strip forms a solid unit with the tire after vulcanization.

At the booth of the Sterling Auto Tire Company is shown a tire retreaded with one of these bands and in addition to this Mr. Bosch says that his personal car has two of these nonskid retreads on the rear as well as two plain retreads on front wheels, all done at his shop, with Miller stock.

BIG HORSE SALE

Read ex-Sheriff Chas. L. Johnson, of New Bloomfield, Pa., Big Public Sale advertisement, March 23rd, of 275 head livestock, found on page 12. —Advertisement.

THE REASON FOR SIX-CYLINDER DOMINANCE

BY GEORGE W. DUNHAM
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The sensation of the 1914 season has been the overwhelming tide in favor of six-cylinder cars. The buying public has viewed with no small amount of interest the steadily increasing trend toward "Sixes." Five years ago there were only eight companies in the entire country building six-cylinder cars. Only two of the eight built six-cylinder cars exclusively. Since that time the demand has grown so rapidly that this season 37 of the 43 leading manufacturers in the United States are building "Sixes." And this does not include any but the best known cars. There are in addition probably eighteen or twenty other makes of "Sixes."

Of these 37 leading companies, 14 are building "Sixes" exclusively. Eleven manufacturers who last season built only "Fours" are this year building both "Sixes" and "Fours."

This rapid increase in six-cylinder production is due to no mere whim. These leading manufacturers have not made the great investments necessitated by an entire change of production plans to satisfy a persnal fancy or a fleeting public vogue. There are some good and sound reasons back of the growing dominance of six-cylinder cars. It has been said truthfully that no man who has ever driven a "Four" can ride a hundred miles in a good "Six" without acknowledging the superiority of the more modern construction.

For he will find the "Six" more silent, smoother running, infinitely more flexible. He will find that it does its work, whether crawling at a snail's pace through traffic, climbing steep grades or plowing through sand, with less fuss. The "Six" has been called the "effortless car." I think that this is a very descriptive phrase, for the most impressive thing about a well-built "Six" is the ease with which it does everything required of a motor car.

These qualities of silence, smoothness, flexibility, are possible only in a "Six." Actual experience has proved that no "Four" can possess them in a like degree. The very principle back of four-cylinder construction precludes the possibility of the steady flow of power which makes a good six-cylinder car as flexible and constant in its pull as a steam engine.

The four-cylinder motor theoretically applies power constantly to the crank shaft. In actual practice there is a gap between the power impulses in every four-cylinder motor. This gap is caused by the waste in power necessary to overcome friction and the weight of moving parts.

In the "Six" there is no interval in the power stream. The working strokes of the six cylinders overlap. In a complete revolution of the "Six" motor, one piston begins its working stroke before the preceding piston has finished work. This means that power is delivered constantly to the crank shaft. And constant, steady power and proper balance of parts which makes it possible means the elimination of vibration.

The result is that the six-cylinder motor works easier than any "Four." What is more, it wears longer because the vibration in a "Four" is destructive. It causes unusual wear on bearings and moving parts.

I don't mean to say that there is no field for the four-cylinder car. "Fours" are just as good to-day—probably better than they have been in the past. In certain very light types of cars it would be inadvisable to use anything but a four-cylinder motor. Cars of this class are not expected to overcome the obstacles which the larger, more powerful cars are expected to meet without hesitation.

But the fact remains that the six-cylinder principle has been proved vastly superior to the four-cylinder principle, just as the four proved superior to the twin-cylinder motor, just as the two-cylinder motor proved superior to the single cylinder motor.

The superiority of the "Six" does not lie in the fact that it will travel faster than a "Four," for this does not necessarily hold. Practically any "Four" will travel as fast as anyone wants to go or ought to go. It is not that the "Six" will climb a hill any faster, or will pull the weight of the car through any deeper mud.

But the "Six" will do all of these things easier, with less wear and tear on the machinery, with less effort on the part of the driver and with greater comfort to the passengers than any "Four."

A well built six-cylinder car has the flexibility of the turbine. It will crawl at two miles an hour through crowded traffic and pick up in just a few seconds to 25, 30, 40 or even 50 miles an hour without shifting gears.

A rightly designed six-cylinder motor is so vibrationless that even at high motor speeds it is possible to balance a pencil on end on the cylinder block. Such a wide range of speed and such entire absence of vibration cannot be built into a "Four."

And actual tests have proved that a "Six" rightly built costs less to own than a "Four" of the same size and power. The presupposed high cost of a "Six" has been due to the fact that "Sixes" and "Fours" haven't been put on the same basis. It has been customary to compare a "Six" capable of developing 50 horsepower with a "Four" capable of developing 30 horsepower. This is obviously an unfair comparison.

Experience shows that the difference in the cost of gasoline consumed by a "Six" and a "Four" of approximately the same power amounts to only $12 to $15 in 10,000 miles of driving. Compare this slight additional cost with the difference in cost of upkeep. The unceasing vigration in a "Four" means costly repairs. One adjustment of the connecting rod bearings more than makes up for the difference in the cost of gasoline. A "Six" which is so vibrationless that a pencil can be balanced on the running motor is not pounding itself to pieces. There are years of extra service in the well built "Six" that cannot be had in a "Four." So in the long run it is cheaper to own a "Six" than to own a "Four" of equal size and power.

These are the principal reasons why 37 of the leading manufacturers in the United States are building "Sixes" in ever increasing numbers. The "Four" is gradually being dropped, just as the single cylinder and the twin-cylinder motor have been dropped. Next season there will be an increasing number principle will be confined, I am inclined to think, almost entirely to the cheaper cars. The man who spends $1,800 or over for a car this season should certainly buy a "Six." In purchasing a "Six" he goes with the rising market. And if he pays $1,800 or more for a "Four," he is buying against a declining market. The dominant production of "Sixes" among the forty leading makers in the country is proof that this is true.

MOTORCYCLE CLUB HAD BIG LUNCHEON

Members of the Nomad Motorcycle Club met last night and ate a clam soup supper prepared by Victory Harlacker. Covers were placed for forty members and guests.

Addresses were made by George Derzon, representing the Federation of American Motorcyclists, who talked on the good results from a State wide movement and by Josiah Starr. Five new members were elected.

TO FORM PEACE SOCIETY

Formation of a branch of the International Peace Society will be made in this city, according to the plans of Rabbi Charles J. Freund, of Ohev Sholom Temple, who is a prominent member of the society. Other local people are members and it is planned to form these into a local society future on peace to be given here June 5 by Rabbi J. Leonard Levy.

STANLEY STEAM CAR HAS MANY ADMIRERS

Paul D. Messner's Exhibit the Only Car in Show Not Using Gas For Power

The Stanley steam car at the local automobile show has received a liberal share of attention. This is the only car in the entire show that is not dependent on gasoline for motive power. Throughout this section there are a great many owners of Stanley steam cars. The advocates of steam cars claim many advantages for this method of propulsion. In hill climbing it is said that a steam car will pass any car on the grade, and the advocates of steam claim it is easier on tires because of a steady pulling motion. In favor of the steam propelled car, Charles A. Brown writes as follows in the Horseless Age:

"I am gratified to see the reviving interest in steam cars of which the letter from Mr. Prior in your issue of July 2 is an indication.

"The present gasoline automobile is a marvel of ingenuity. It shows what persistent inventive genius can do in adopting a machine to a use for which it is naturally unfit. A gasoline engine is essentially and normally a constant speed motor, which does not start from a state of rest, as everyone knows. Hence, about the most inappropriate use to which it can be put is the running of a variable load variable speed device like an automobile, which has to stop and start at frequent intervals. Inventors have done wonders in the way of adapting this gasoline motor to a use to which it is not normally fitted, but this has been done at the expense of complication and the addition of devices such as the self-starter to overcome the difficulties inherent in the gasoline motor.

"On the other hand, the steam engine, which has been the standard prime motor for a century, is particularly well adapted to variable speed and variable load and, without the addition of any mechanical arrangement, produces an infinite number of speeds from the lowest speed up at a high power efficiency. This makes steam the ideal power, particularly for commercial vehicles.

"The greater economy of the internal combustion engine, in view of the much heavier construction of car and equipment that is necessary for gasoline car, is a delusion. There is more saving in tire cost, due to the lighter weight of the steam car of equal performance, than the extra expense of the gasoline required. Moreover, there is no greater economy necessary in a gasoline car than in a steam car.

A modern heavy automobile equipped with all the accessories, including lighting and self-starting dynamo and battery, is doing well to run at an expenditure of eight miles to the gallon of gasoline. A steam car of equal performance can do as well or better, and this leaves out of account the great improvements in combustion which may be expected to be applied to the steam generator, and which have already been made practical in certain lines, such as stoves and furnaces. I refer to the Bonecourt surface combustion process. The practical advantages of steam are such that, as is well known, one concern most conservatively managed has ben making a continuous success of the steam car business, and the reviving interest in steam cars is shown by the article already referred to and by other articles in technical papers and by the fact that at least three new concerns are now engaged in development of steam cars, and there are probably others of which I am not informed."

GOVERNOR AT MUZZLE CLUB

Governor John K. Tener, Secretary Walter H. Gaither, Executive Controller S. C. Todd, Mayor Royal and the members of City Council, District Attorney M. E. Stroup and Mayor Frank B. McClain, of Lancaster, together with other prominent men, will be guests at the beefsteak dinner of the Muzzle Club at the Harrisburg Club at 7 o'clock to-night.