

Highway and Auto Dope

Traffic and Tourist News

AUTOMOBILE NEWS

Autos Aid Health

By HERMAN N. BUNDSON

Commissioner of Health, Chicago
Paraphrasing St. Paul: "Stop taking stuffy air, only open your motor car windows and take plenty of fresh air, for your health's sake."

You'll find fresh air and sunshine on the highway, to health.
An excellent way to improve the health of mind and body is to ride out in the open air. In the springtime, the world is a happy place to live in and there are many pleasant things to see along the great highway of health.

Fresh air is a stimulating agent which helps to keep us fit and taken together with sunshine it is a true tonic, benefiting both the well and the ill. Every person is entitled to a place in the sun. It is here for the taking.

Pure air promotes physical and mental perfection. Breathing deeply helps to prevent an accumulation of fat, quickens the digestive processes and aids in ridding the body of poisonous waste products.

We need fresh, pure air all of the time, sleeping or waking, resting or working, sick or well; our supply of fresh air never should be curtailed, either in quality or quantity.

Nothing can compare with a ride in an open vehicle out along sunny parks and into the countryside. There is early in the skies and health in the woodlands. With each draught of fresh air, there comes new courage and greater effectiveness in meeting the problems of working and living.

Let us partake of the fresh air and sunshine in abundance. These life-giving elements will clear up that old winter cold and cough and bring red blood, again to the veins.

Let us ride in the open, in a frame of mind to enjoy that off the cob-webs of every-day life and as we ride, let us not only look, but see, nothing removal of life in its many forms and manifestations.

Have your car windows opened so you may have every opportunity to breathe fresh air. Be suitably dressed for the open, of course. See that the car has enough oil, water and gas, then throw the throttle wide and go where vim, vigor and vitality await you—any place where fresh air and sunshine abound.

Be not afraid of colds. Dress warmly. If you can, select a car with readily detachable body to shut out the storms of spring, the sudden squalls of weather. Avoid getting wet and then remaining in the wind.

There are cars as open as the out of doors, yet which can be enclosed suitably against extremes of weather. These are ideal. But keep them open until storm requires enclosure. If the storm requires closing only one side, keep the other open. For fresh air is unseen gold that enriches your treasury of health.

EXPERT TELLS ABOUT TORQUE

Vital Power in Motor Car About Which Comparatively Little Is Known Explained by Factory Engineer.

"Torque" in an automobile seems to be such a mystery to many owners that G. Clark Mather, chief engineer to the Paige-Detroit Motor Car Company recently sat down and wrote the following for the Paige and Jewett house organ:

"You have seen the word 'torque' in print a good many times. You have heard it spoken. Possibly you have used it yourself. What does not mean? Let us see what the dictionary says.

"Webster's definition of 'torque' is, 'that which produces or tends to produce rotation.' Not so clear. Maybe this less technical explanation would be a little easier to understand. Torque in an automobile motor is the result of the explosive power to the contents of a cylinder full of gasoline vapor being applied through the medium of a piston and connecting rod to turn the crankshaft.

"For example, let us say that the gasoline vapor in one cylinder of an automobile motor is exploded. The piston that slides up and down in that cylinder imparts, through its connecting rod, a thrust to the crankshaft. This thrust is converted to rotary motion by means of the crankshaft and when expressed in pounds in a given radius, is termed torque and is given in inch pounds or foot pounds torque.

"Thus is twisting power. This twisting power represents pressure to turn the crankshaft only when the piston assembly is being pushed downward by an explosion.

"To visualize what this means in manufacturing power, draw a circle. Consider this a revolution of a throw of the crankshaft. Now, if this circle were a disc, say you were going to apply a downward pressure to its outer edge to make it revolve, how far around would the downward pressure be effective? The force applied straight down on the top of the disc would not have a revolving action. The same is true of the force applied straight down at the bottom. There would remain a downward connecting

stroke of some 135 degrees. In the four-cycle engine in almost universal use today, each cylinder contributes one power stroke for every two revolutions of the crankshaft. As one circle or revolution equals 360 degrees and 180 equals 720 degrees, a little figuring shows why the four-cylinder, six-cylinder and eight-cylinder only two power strokes of about 120 degrees each, or approximately 270 degrees, in a complete revolution of the crankshaft. Therefore, the twisting action or torque of the crankshaft is not continuous.

"On the other hand, the six, with three explosions to the turn of the crankshaft, has overlapping power impulses. Each power stroke begins to exert its pressure before the preceding one leaves off. Each power stroke laps over the preceding one by a number of degrees. Smooth, steady power like the big six-cylinder Jewett engine produces is the result.

"Because torque is twisting power, the basic factor of driving power, it is easy to see that other things being equal, the bigger the charge of gasoline and the more powerful the resultant explosion, the greater the torque or revolving force exerted by each cylinder of gasoline vapor fired.

"Horsepower is a term used to express the relation of the torque to the speed at which the crankshaft is rotating. The horsepower rating of an engine is not complete. The revolutions per minute of the motor must be known to determine its real efficiency. Some motors have torque only at speeds too slow to build up any amount of horsepower; others must be run at a wrecking speed to produce their maximum efficiency. The object is to get the most torque at low speeds and to keep it as long as possible.

"The big motor of the New Jewett has ample torque. In other words, ample twisting power, at low speeds where you need it most. Push a New Jewett over the floor. See how much more pressure is required to put the car in motion than is needed to keep it moving once it is started. What you did to move the car, the motor must do every time you start the car.

"The Jewett motor's torque is greatest at relatively low speeds. It is much greater than other cars in its price class. Its extra size gives it its greater torque. This power is needed not only in starting but in going slowly over rough roads in high gear, in accelerating and in climbing.

"Smaller motors can only secure big enough power by being speeded up, by the using of small wheels and by using special gear. At the same time speed on the road,

the smaller motor must turn over many more times than the big motor. This means overstrain and an early breakdown. And if the smaller, underpowered motor is not speeded up, it struggles along, always overstrained, always underpowered."

HOW ABOUT YOUR OWN?

If there's one thing that's bound to catch the eye of any driver, no matter how unobserving otherwise, it's a wabbling hind wheel of a car ahead or the crippled front "roller" of a machine approaching. All who witness these premonitions of danger prophesy trouble ahead for the owner.

But the owner seldom learns the truth about the condition of his own wheels because he is busy speculating about the crooked courses the wheels of passing cars are taking. Car owners who feel that the wheels are of some account make it a rule occasionally to jack up each wheel in turn and spin it.

COMMON OWNER MISTAKE

There should be a slightly greater clearance between the stem of an exhaust valve and its push rod than between the corresponding parts of an intake valve. Most car owners make the mistake of making all the clearances equal, whereas the exhaust valves should be allowed more room for expansion as they always operate at a higher temperature.

It is easy to find fault. But there isn't any reward.

DODGE BROTHERS COMMERCIAL CAR

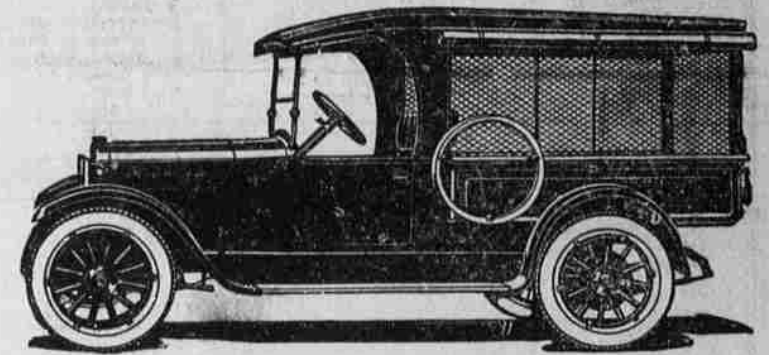
Dodge Brothers Commercial Car advertises the business it serves.

In fact, merchants value the appearance of the car second only to the low-cost, dependable mileage it delivers.

Screen Commercial Car \$910 f. o. b. Detroit, \$1055 Delivered

L. C. Smith

La Grande, Ore.



CHRYSLER IS LIKED ABROAD

The Chrysler six has caused as much comment in European motor circles as it has on this side of the water. The following is an article which appeared in "The Motor" (London, England).

"The six-cylinder Chrysler with its roomy body, made by the Fisher Corporation, is the most luxurious car. I took one out for a short run the other day and was very impressed. In the first place you have a powerful six-cylinder engine, which it is claimed will maintain, with enclosed body and full load, a speed of 70 m. p. h. There was no opportunity of testing it at this speed, but I did ascertain that a speed of 48 m. p. h. can be reached in second, and to accelerate the car from 25 m. p. h. to 55 m. p. h. was a matter of a few seconds, with only a very slight depression of the accelerator pedal. So smoothly does it run and so excellent is the suspension that 50 m. p. h. feels like 30 m. p. h. for it slides along without fuss or noise. The hydraulic four wheel brakes fitted are a notable counterpart to a high speed potentiality. I found them smooth in action and very powerful."

"Very few people realize the harm that is done by drawing into the engine, mixed with the air, particles of road grit, which not only act as an abrasive, causing wear of the cylinders, but also form a quite substantial proportion of the carbon deposit in the cylinder heads. With the air cleaner, as fitted to the Chrysler, impurities are thrown out by a rapidly rotating fan in the chamber from which the air is drawn, which means, of course, very much longer life for the engine."

"The oil refiner in a means of cleaning the oil of its impurities and maintaining its viscosity. The oil, in the course of its circulation, passes to a small tank on the engine dash-board, and this contains a cartridge, renewable every three months or so, which separates the deleterious matter. I am told that after running one of these cars for

OLDS FRANCHISES TAKEN BY DEALERS IN MANY STATES

Fifty-seven new Oldsmobile dealers located in 27 states obtained franchises in one week in April. This one week's record is indicative of the position Oldsmobile holds in the trade, according to L. G. Dodge, assistant sales manager of Oldsmobile Works. There are now 2400 Oldsmobile dealers in this country, the largest number in the history of the Olds organization.

"The trend of public demand in the Oldsmobile price class is far a six-cylinder car," said Mr. Dodge. "This no doubt has some bearing on the desire of many dealers to obtain an Oldsmobile franchise. There also is the feature of Oldsmobile's affiliation with the General Motors corporation, which gives the dealer the advantages of financial benefits of the General Motors Acceptance and Exchange corporations, as well as assurance of stability and permanency."

SILK-LINED COATS

"Coats are lined with real 'silk', made the clothing merchants' notion of superior men's wearing apparel.

Much is made of that fact,—the inclusion of real quality materials to support the main fabric of the garment.

A suit costs only from \$25 to \$75. Yet there are those who will spend \$1,250 to \$3,000 for an automobile and take little notice of the "thing"—the upholstery. To learn whether it will look as well a year hence.

Broadcloth and similar woven fabrics can be cleaned successfully only by taking them off the cushions. A vacuum cleaner and ordinary soap and water will clean thoroughly the rich mohair used in Studebaker cars, and the mohair costs twice to four times as much as the other.

The silk-lined coat buyer should be, also, a real mohair upholstery buyer.

Only Studebaker Building Can Produce Studebaker Quality

Which accounts for the extreme beauty and fine coachwork of Studebaker Closed models.

Never such a motor car for the money as you find in this New Studebaker. Deep, luxurious seats upholstered to withstand long wear and unpleasant shabbiness—inlay panel effects that give unusual smartness—motoring appointments and conveniences that make long trips more comfortable.

Many are the little things that have been given special attention in the New Studebaker Closed Cars—yet little things that produce a perfected whole that is hard to resist.

Not the least attractive thing about the Studebaker is its price. Only the tremendous production and sensational demand for the Studebaker could make such values possible.

We would like to show you one of the new models at your convenience.

M. J. GOSS

Studebaker Sales and Service.

"This Is A Studebaker Year"



Pride In Doing Difficult Things Well

A workman who lacks pride in the work he is doing and confidence in his ability to do it well does not deserve patronage.

We pride ourselves on doing a difficult machine job or welding job as well as better than it could be done anywhere else. There's no variation in quality in this shop—every piece of work is of the highest standard when it is finished. And we are proud of it.

Back of that pride we have many years of training and experience and study to make sure it is more than justified.

Leighton's Welding & Machine Works

"Tell Your Garage Man to Have Leighton Do It."

1311 Washington Ave.

Phone Main 737

"Many a Good Turn" in Vikings!



Hundreds, even thousands of miles after you'd be satisfied to replace them, knowing you'd had your money's worth, VIKING TIRES keep on eating up the miles. It's the way they're built and what they're built of that gives VIKINGS this extra staunchness and stamina. Try VIKINGS.

"Viking Tires Will Do You Many a Good Turn"

SNYDER & McKENNON
1308 Adams Ave.