

TERROR OF SKIDDING IS PREVALENT AT THIS TIME

F. W. Mueller Says Use of Brakes Should Be Avoided When Anti-Skid Chains Are Left at Home

By J. W. MUELLER

ASK THE average motorist what he fears most in the daily handling of his machine and the answer will be "skidding," for if there be one thing more than all others that the motorist fears, it is that sickly sinking of one's interior that comes with the sudden and entire loss of control inevitably accompanying a bad skid.

The reckless, the foolish and the incompetent pedestrian can be guarded against; even the man who loses himself in a brown study in the middle of a busy street and the old lady who flutters back and forth in the path of a car like a befuddled hen can be taken care of with the brakes. But with a skid once started only Providence and the skilful hand at the wheel are of any avail. The side slip is almost always entirely unexpected, but, unlike the former, it is not always unavoidable. The case is distinctly one for preventives and not for remedies. There is no remedy for a bad skid but to patch up the damage and gather together your shaken nerves as best you may.

As an absolute preventive of skidding non-skid chains will naturally suggest themselves at once to the reader, and it may be added that two of the insurance companies that write automobile accident policies have taken cognizance of the frequency of accidents caused by skidding and recommend the use of chains. In truth, if the chains are in their proper place on the tires our "ever present danger" has been exorcised, so that the remarks which follow may be taken merely as advice for that day when somebody forgot and left his chains in the locker at home. And right here we can offer the best anti-skid rule, to keep the chains in the car and not to trust to remembering to put them there just before you start out.

FIRST PRECAUTION.
Skidding is the result of the failure of one force to counteract another—in other words, the momentum of the machine in excess of its traction. It is most likely to occur when an attempt is made to alter the direction of travel when on a slippery surface. Consequently, the first precaution to be observed is to drive slowly over the occasional stretch of wet

asphalt. A slow pace will also obviate the necessity of using the brakes in the majority of instances, for braking is one of the things that should be avoided by all means when attempting to regain control during a skid, for if the rear wheels can be made to resume their usual function of rolling after the front ones, the skid will be over. The average motorist's first impulse is to jam on the brakes hard, with the result that the driving wheels immediately lock and continue to travel sideways on the small section of the tire that lost its traction and caused the skid in the first place.

If it be possible to avoid the use of the brakes, and the front wheels be thrown immediately in the same direction as the rear of the car started to slide, the tendency to keep up this process until the car lands up against the curb or some other equally unpleasant obstruction will be counteracted and its progress crabwise arrested. For example, if in attempting to pass another vehicle to the left the rear wheels refuse to take part in the maneuver, but start on a swing for the curb at the right, the steering wheel should be immediately swung in the same direction, thus presenting the four wheels of the machine as a broad "V" against the sliding action.

When the pace is overfast, considering the slipperiness of the surface, the energy of the moving body cannot be absorbed in a short distance either by the brakes or the turning of the steering wheels to counteract the slide. Then occurs that most-to-be-dreaded of all skids—the "sashay on all four," against which only a swift mental appeal to Providence and a resolution to use the tire chains next time are of any avail. The rolling momentum of the car is transformed into a force that sends the whole machine along sidewise its progress aided by the locking of the rear wheels, and the driver finds himself utterly helpless. As a producer of skids of the most virulent type street cars are away above par.

As the only sure and dependable means of preventing skidding anti-skid chains stand supreme. I always have a set with me. They are easy to put on and easy to take off, and if they were twice as hard to handle I should still believe that the element of safety they add to my pleasure would make them well worth while.

EVEREADY BATTERY Completely Eliminates All Sulphation in Storage

Many who believe that injurious harmful sulphation in automobile storage batteries is a necessary evil will be surprised to learn that a new battery called the Eveready is sold with a positive guarantee to be non-sulphating. It will be a boon to automobilists, for sulphation is the greatest source of trouble in storage batteries.

The claims of the Eveready are very sweeping. The complete elimination of sulphation means a great deal less care and attention, insures maintaining full capacity and efficiency, makes frequent recharging unnecessary and gives longer life. This battery, of course, does away with regular periodic recharging and overcharging to prevent and reduce sulphation. No injury results from bucking of plates on heavy discharges.

These batteries are shown at the 1916 automobile show in Convention Hall by the Frank H. Stewart Electric Company, Old Mint Building, 37 and 39 North 7th street, and include starting, ignition and lighting types.

SHORTAGE IN STEEL HAS AFFECTED AUTO MAKERS

War Material Has Caused the Makers Much Concern During the Last Few Months

No one is more sharply affected by the present steel shortage than is the automobile maker, but there is good reason to believe that the organized strength of the automobile industry may prove sufficient to tide over the difficulty and prevent the development of serious consequences. The automobile manufacturers were never in better position to cooperate in overcoming obstacles than they are today.

With an unsurpassed demand for their products, and with the many manufacturing economies that have been introduced within the last two years, the stringency of materials is practically the only cloud in the sky, and this can be dis-

pelled by prompt action along lines that are already pretty well defined.

A possible source of relief for the automobile makers is said to lie in a revision of steel specifications, whereby certain refining processes can be more cheaply and quickly carried out. Such modifications, it is declared, can be introduced without affecting the strength and durability of the metal, and are believed to be generally favored by the steelmakers, who claim they are at present handicapped by too rigid restrictions which influence adversely both deliveries and, to some extent, prices as well.

The particular point at issue is the sulphur content of the carbon steels that

are widely used in automobile manufacturing and which are produced under the standard specifications of the Society of Automobile Engineers. These specifications, which are almost universally employed by the automobile makers, call for a sulphur content in carbon steel of not to exceed five hundredths of 1 per cent.

It is claimed by accredited authorities, however, that it is possible to permit a considerable increase in sulphur without impairing the strength of the material or its hot-working properties to an appreciable extent.

Tests conducted by Dr. J. S. Unger, of the Carnegie Steel Company, are said to have demonstrated the truth of these assertions in a thoroughly scientific manner.

"Never before have the automobile makers been so well able to meet and conquer a common obstacle as they are today. And this fact must be taken into account in any consideration of the possible influence upon the automobile market of the present difficulty in obtaining materials for the coming year."

It makes this assertion because I believe the over-demand for materials is destined to continue indefinitely, certainly outlasting the war by a year or more, during the early stages of the European reconstruction, and because American manufacturers in all lines, in endeavoring to adjust themselves to it, must necessarily suffer some embarrassment, if nothing more grave."

TRAILER A MEDIUM TO INCREASE TRUCK TONNAGE

The great economic problem of increasing the carrying capacity of the motor-truck and adding to the profitable tonnage per load is being largely solved by the use of trailers. It is a mathematical fact that every car can pull from two to four times as much as it can carry, and in addition bear all that it was made to carry.

The Keystone Auto Supply Company advocates the use of the Simplex trailer. The Keystone Company claims for this trailer that it is the only one that actually follows in the track of the truck. It is built on mechanically correct lines and has in it the kind of material and workmanship to insure extended service. Demonstrations will gladly be furnished at 730 North Broad street.

NEW WILLYS-OVERLAND IS ATTRACTIVE MACHINE

Four New Features Found in Model 75, the Latest Type on Market

Of the various models brought out by the Willys-Overland Company during the last season none have been received more enthusiastically than the latest and smallest member of the family, which is known as model 75. Only a few weeks have elapsed since John N. Willys announced to the public the details of this car.

The crowds which continually surround it in the Overland booth at the show are a good indication of the world-wide interest it has already created.

The price appeals strongly to those who prefer a car with the advantages of the larger and higher-priced models, but that it is smaller, lighter and more economical to run. Model 75 is designed to meet this demand and not to resemble the larger four-cylinder Overland model. Although the wheel base of 104 inches allows a body providing comfortable seating capacity for five passengers, the car weighs but 2100 pounds. The light weight assures the utmost in economical operation.

Four advantages seldom found in a car of this kind stand out prominently in this latest product of the big Toledo factory. An electric starting and lighting system, four-inch tires, cantilever rear springs and electrical control buttons on the steering column are a sample of what the Overland Company has been able to include in the high-grade equipment of this low-priced car.

The electric starting and lighting system is of the efficient two-unit type and is entirely independent of the ignition. The six-inch tires are larger than can be found on any car of similar specifications, while the cantilever rear springs are acknowledged to be the easiest riding springs ever designed.

The use of these springs reduce to a minimum the jarring produced by driving over rough or uneven roads.



PAUL SMITH Vice president in charge of selling division Chalmers Motor Company.

MOTZ and PORTAGE TIRES ARE HALL SPECIALTIES

L. S. Hall specializes in tires, the Motz and the Portage.

Mr. Hall, who is head of the L. S. Hall Rubber Company, of 182 Ridge avenue, is one of the most experienced tire men in the industry. His connection with pneumatic goes back to the old bicycle day, long before the advent of the automobile.

In handling the Motz and Portage he has selected two very popular brands. The Motz is a resilient solid tire, which is used for electric and light delivery trucks, and is guaranteed for 10,000 miles. The Portage is pneumatic—guaranteed 4000 miles.



The Fairfield "SIX-46" \$1295 F.O.B. DETROIT

Here are the facts—established by thousands of American People

FIRST and foremost, let us remind you that the Paige Fairfield "Six-46" is a tried and proven success.

It isn't necessary for us to "claim" that this handsome seven passenger car will render unfailing service day in and day out.

It isn't necessary for us to "claim" that it is staunchly built—mechanically efficient—superbly designed.

All of these things have been definitely established by thousands of American people who own the "Fairfield"—people who have selected it in preference to all other light Sixes on the market.

When you buy a Paige "Six-46" today, you are buying a car that has passed the experimental stage. You are buying a car of known quality—known ability.

In a word, the "Six-46" is an eminently safe automobile investment

It is a good car—not merely because we say so—but because its owners have conclusively established this goodness in the gruelling tests of more than a year's actual road work.

Other "Light Six" makers are now introducing 1916 models. Some of these makers feature new designs—new power plants—new engineering theories.

In the course of time, these innovations may prove thoroughly practical in every way.

But until that time comes—until these cars have been thoroughly "tried out" in actual service—the prudent man will be inclined to buy the car with a tangible record of accomplishment behind it.

As it stands today, the Paige "Six-46" is a thoroughly finished product.

By carefully studying the combined experience of owners, we have been able to proceed intelligently in perfecting this car until it has been brought up to the current day—the current hour—of six cylinder elegance and luxury.

In our opinion, no more efficient six cylinder power plant can be produced and every feature of the car throughout is in keeping with the high mechanical standards.

Power—more power—power to spare! That is the only way that you can describe this wonderful motor.

So far as flexibility is concerned, you can amble along at two miles an hour or sweep up to sixty without change from high gear.

Steep hills and heavy clinging sand roads are mere child's play for the "Six-46."

This car is practically throttle controlled. It responds to the slightest impulse of the accelerator and is ideal for the woman driver who must pick her way in the thick congested traffic.

And then consider the matter of design.

Beyond any question of doubt the Fairfield is the most widely copied car that has ever been placed on the American market.

Remember, Paige first introduced the pure European streamline twelve months ago.

Look around at the automobile shows and see for yourself whether or not this design has been copied by practically all makers of quality cars.

Above all, the Paige "Six-46" is a "sensible" car.

While there has been considerable talk about excessively high speed motors, we flatly refuse to support any such propaganda.

Paige motors are built to endure, and we believe that it is impossible to reconcile excessively high speed with minimum wear and tear on working parts.

It is our policy in the Paige factory to build safely and sanely. The cars that we market are established successes—not experiments.

On this basis, we enjoy—and shall continue to enjoy—the absolute confidence of Paige owners and Paige distributors the world over.

PAIGE-DETROIT MOTOR CAR COMPANY, Detroit, Michigan

At the Show

Space 17

Lewis Spring & Axle Co.'s

HOLLIER

EIGHT-CYLINDER TOURING CARS ROADSTER

Colonial Motor Co. INCORPORATED

664 N. Broad Street DISTRIBUTERS

Fairfield "Six-46".....	\$1295
With Detachable Win Top.....	1548
Cabriolet.....	1500
Sedan.....	1500
Town Car.....	2250
L. S. Hall, Detroit	

BIGELOW-WILLEY MOTOR CO.

304-306 N. Broad St., Philadelphia, Pa.
Phones—Bell, Spruce 6410; Keystone, Race 1362