

COLLISIONS CAN BE PREVENTED

Motorists Should Be Positive That Brakes Are in Good Repair.

A great many collisions between automobiles and other vehicles, collisions which frequently have caused serious injuries and even deaths, would have been averted if brakes were kept in proper condition, according to Charles M. Hayes, president of the Chicago Motor club. "Many motorists drive from one end of the year to the other without paying the slightest attention to their brakes. Suddenly the brakes wear out, and in some emergency they fail to function," says Mr. Hayes.

The accident prevention department of the Chicago Motor club makes the following suggestions, particularly to motorists contemplating long tours:

Test Brakes Monthly.

They should be sure that their brakes are in good repair. At least once a month the rear wheels of the car should be jacked up and the brakes tried to see if they grip evenly. When the lining wears down to the rivet heads, brakes should be relined. The motorist will find it much more economical to have the brakes relined than to have to pay for damage to his own or some one else's car. Attention should be given to the emergency brake pawl to see that it does not become worn so that it will release accidentally. When a car is left in gear on a hill the front wheels should be cramped against the curb. The careful motorist will make certain that all cotter pins are replaced, especially those located in out-of-the-way places. One little pin out of place might cause a bad accident.

Stopping on Wet Pavement.

When stopping on a wet pavement, the skillful driver will be sure to close the throttle and apply the brake, leaving the clutch engaged, until just before the car is brought to a standstill. This will prevent locking of wheels, which is likely to cause skidding. The clutch should be left engaged when descending an ordinary hill, and if the hill is steep the driver should shift to second or even first gear, leaving the clutch engaged and the throttle closed. Keeping a car in low gear helps to keep it under control. On long hills the foot and emergency brakes should be used alternately to keep the car at a low rate of speed and to prevent burning out of the brake linings. Coasting down hill with the transmission gear in neutral is a dangerous practice, not indulged in by good drivers.

"But, above all," concludes Mr. Hayes, "brakes should be kept in perfect order."

Idaho Potato Is Newest Thing in License Plates

A large Idaho potato is the newest thing in automobile license plates. The state has adopted a tag representing a big brown potato for distribution next year. Numbers and other official information on the plate are painted green. Use of the plates will commence January 1, 1923.

The secretary of state has ordered 120,000 sets of these plates and it is Idaho's intention to feature a different product or industry each year. The potato was selected to lead the field because of the national reputation this Idaho product has gained.

Officials predict other states will follow Idaho's lead and soon Missouri mules, Georgia peaches, Maryland oysters and whatnot may be seen rolling around the country on automobiles.

Rust Adds Heavy Tax to Auto Cost

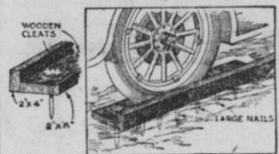
Corrosion, what is popularly known as rust, is costing American automobile owners 1 cent more for every gallon of gasoline they use, is the report of Dr. F. N. Speller, famous petroleum chemist, to the members of the American Chemical society at their Institute of Chemistry at State college, Pa.

"Estimates indicate that the annual cost of corrosion in the petroleum industry," he says, "is in excess of \$1,000,000."

Chemists are trying to discover means to combat this costly evil in this and other industries.

Get Automobile Out of Mudhole by New Device

Ordinarily only one rear wheel gets stuck in a mudhole in the road. If the mud is very soft, even chains may not prove of much use. However, you will find that a length of board fitted with wooden cleats, and through which a number of long spikes have



A Cleated and Spiked Board, With a Guide Running Along One Edge, Will Help in Getting Your Automobile Out of Mudholes.

been driven, as shown in the illustration, will provide a path for the wheel out of the hole. Another board nailed along the edge will prevent the wheel slipping off. When not in use it can be strapped under the running board —Popular Science Monthly.

Go to Machine Shop in Purchasing New Piston

Just because dealers for many makes of cars, even in cities, do not carry spare pistons in stock should not cause motorists worry.

Large machine shops and parts jobbers carry stock pistons which can be machined down until they fit perfectly. This makes it unnecessary for the dealer to carry spare pistons. Furthermore, it is a difficult matter to make a new piston fit a worn engine unless it is machined. Obviously, it is not practical for a dealer to carry pistons of all different sizes, where sizes vary by sixteenths of an inch.

If a new piston is needed, it should be turned down until it just matches the old one. Both pistons should weigh the same. The machine shop also would fit the wrist pin and cut the grooves for the exact number of rings needed.

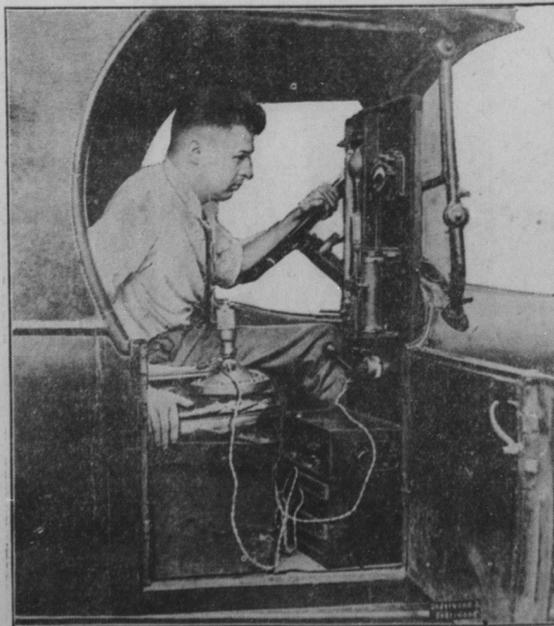
Of course, if all new pistons are being installed because of wear, they should be oversize.

Paris Plans Testing Two Wireless Control Autos

Driverless automobiles, controlled by wireless waves, are to be demonstrated publicly at a summer festival in Paris.

Two of the cars have been equipped with a mechanism that is said to work well in practice and they are to be operated on the Colombes stadium track, where the 1924 Olympic games were held. Wireless control of an airplane has been tested by the French army, but little has been said of the experiments except that they were successful.

TO MAKE AMBULANCES MORE COMFORTABLE



The photograph shows D. C. Ritchie of the United States bureau of standards making tests of the riding qualities of busses, trucks and ambulances by an electrical contact accelerometer, seeking ways and means of making riding in such conveyances more comfortable. The accelerometer measures the bumps and jars and points the way to where improvements may be made.

FACTS -AND THE OPEN MIND

THE MOST important element in business success—and the most difficult—is to be sure that you have all the facts before you act.

TO GET them all, from every possible source, is the first objective in General Motors. The Research Laboratories contribute some. These are nuggets, left in the crucible, after hundreds of ideas that looked good have been burned away. The Proving Ground contributes others. Dealers contribute. The public contributes. Every department contributes. Through the whole organization runs a spirit of inquiry and of rigid insistence on proof.

OUT OF such thinking come the new models announced from time to time by Chevrolet, Pontiac, Oldsmobile, Oakland, Buick, LaSalle, Cadillac—all with Fisher Bodies. And by Frigidaire. Each new model is a tested step forward. Nothing goes into it as a result of habit or guess or pride of opinion.

Nothing counts but hard-won facts, gathered and used with an open mind.

GENERAL MOTORS

"A car for every purse and purpose"

CLIP THIS COUPON

GENERAL MOTORS (Dept. A), Detroit, Mich.

Please send without any obligation to me, your illustrated booklet, "Where Motor Car Facts Are Established," together with information about the particular General Motors product or products I have checked at the right.

CHEVROLET OAKLAND CADILLAC
 PONTIAC BUICK FRIGIDAIRE
 OLDSMOBILE LASALLE DELCO-LIGHT

Name _____ Address _____

PRODUCTS OF GENERAL MOTORS



DELCO-LIGHT ELECTRIC PLANTS



THE NEW ERA IN TELEPHONE COMMUNICATION



IT takes less than half as long to make an out-of-town call today as it did seven years ago.

The average time required in 1920 was four minutes. Today; it is less than two minutes.

If you called a point over 200 miles away in 1920, you waited about fifteen minutes for the connection.

Today very few such calls require as much as ten minutes,

and most of them go through in less than five minutes.

An outstanding accomplishment!

Greater speed has brought a tremendous increase in the use of out-of-town service.

This new-era art is making neighbors of a whole nation—and already has brought within the sound of your voice practically the entire English-speaking world.

THE BELL TELEPHONE COMPANY OF PENNSYLVANIA

J. H. CAUM, Manager



Are You "Knowledgeable"?

Europe has a new word to play with. Every year or so it coins one or picks up an old one used in a new way. This year it is the thing to use "knowledgeable" in lieu of "learned" or words of similar meaning. One may be "knowledgeable" in music, horses, politics, women or anything else.

Plutocrats of Long Ago

Solomon had an income equivalent to \$20,000,000 a year today. Sardanapalus and Nero were golden overlords, and Lucullus spent fortunes on feasts and luxurious living. Both the queen of Sheba and Cleopatra were ladies of great wealth.—New York Times.

Took Name From Paint

The White House gets its name from the fact that after the first executive mansion, which was of buff freestone, was burned by the British in 1814, the walls were covered with white paint to hide the traces of fire, according to Liberty.

In the Crow Family

Birds are divided into groups in much the same way as mammals, says Nature Magazine. The crows, ravens, jays and magpies are usually included in the crow family, Corvidae. The bill is the best common character.

Pedestrian Paces

A good walker makes about four miles an hour if he or she is in good health and is accustomed to walking. A hiker makes about five or six miles, but this pace cannot be sustained over a long period of time.

Scrambled Words

Sylvia, aged six, who has a great liking for long words but who does not always get them right, was heard to exclaim to her baby sister, "Oh, dear, how aggravoking you are!"—Boston Transcript.

Reason Enough

Our mints last year turned out 175,000,000 pennies. Not that a penny will buy anything, but because they have to be given in change for \$1.98, etc.—Pittsburgh Gazette-Times.

Qualities for Success

If you wish success in life make perseverance your bosom friend, experience your wise counselor, caution your elder brother and hope your guardian genius.—Addison.

Bell Music Oldest

The oldest musical instrument is the bell, according to Liberty. Bronze bells have been found in Assyrian excavations and in mummy cases, centuries old, in Egypt.