



AUTOMOTIVE SECTION

BUY YOUR CAR NOW.



WEEKLY MOTOR NOTES.

ABOLISH THE SPEED LAWS, SAY AUTO SPEEDERS

THE speed laws are all wrong. If there is any kind of a "speed law" it should be one establishing a minimum rate of travel on certain highways. That is, a motorist going five miles an hour at a certain point would be liable to arrest.

These are some of the points brought out by opponents of speed legislation who have made considerable noise in various parts of the country. It isn't the speeder who is dangerous, they say. It is the reckless driver.

And, they emphasize, speed isn't necessarily a component part of reckless driving. On a clear, wide highway what danger is there in opening "er up"? But in a crowded section of the city the motorist who decides suddenly to stroll along at five miles an hour ought to be arrested for reckless driving.

The driver behind might run into him, and a pedestrian might believe he was stopping.

In England.

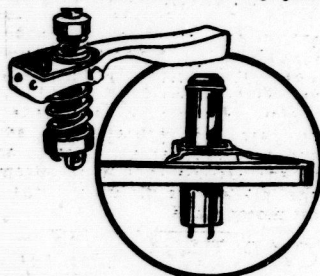
This move against the speed laws has gone quite far in England. There the Automobile Association of Great Britain has collected a mass of evidence on the subject and presented it to the ministry of transport and to parliament. Part of the report reads: "The main proposal the committee on road regulations made was that the speed limit should be abolished. The danger is not on account of the

conditions of traffic on the roads. A speed higher than 20 miles an hour may be perfectly safe on a wide, open road, and a speed of five miles an hour may be dangerous passing a school when the children are coming out. The danger is not in the speed, but in the mode and method of driving."

What has increased the ranks of speed law opponents more than any other factor has been the speed traps along important highways. Automobile associations throughout the country are centering their efforts toward the abolition of such traps and the curtailment of effort on the part of country constables and magistrates.

FOR SHOCKS AND BUMPERS.

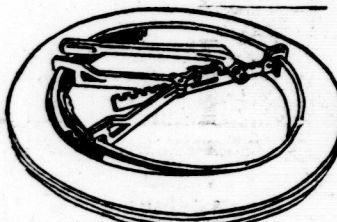
Shock absorber and bumper are combined in this model for a popular



car. The shock absorber is of the coil spring type, and is attached to the front or rear springs. From this extend the arms holding the bumper.

TIRE CHANGED EASILY.

There is little bother changing tires with the use of the rim tool shown here. This is made so that it shrinks the rim for removal of the tire, and extends it into proper shape when the new tire is put into place.

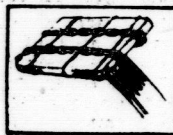


during the instant that this is being accomplished that causes the noise.

We speak of the speed of the teeth rather than the rotational speed of the gears because the gears are invariably of different diameter. One gear might be four inches in diameter whereas the gear to be meshed with it might be eight inches in diameter; when these two gears are rotating at the same speed (in revolutions per minute), the teeth of the larger one are traveling twice as fast as the smaller, and when the teeth are traveling at the same speed the smaller gear is making double the number of revolutions of the larger gear. Hence the necessity for talking of tooth speed rather than speed

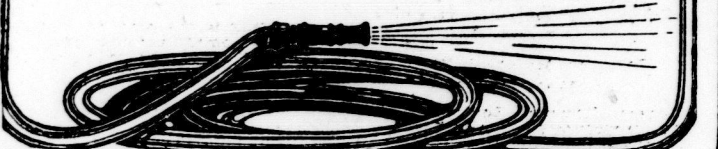
NON-SKID PEDALS.

Your foot is liable to slip off the clutch or brake pedal just at the time of emergency. To avoid accident, put skid chains on the pedals. Wrap a length of chain around each side of the pedal arm and hold them down with wire. They insure safety at all times.



GOOD YEAR CORD HOSE

For lawn and garden
Sold by Hardware
and Department stores



GRAY-DORT The Truth Spreads

The truth about the Approved Gray-Dort is being given by Gray-Dort owners with willingness and enthusiasm.

"My Gray-Dort car has given me much more satisfaction than I ever expected to get from a light car. Running through winter and summer, it has always met any demand I made on it. Adjustments have been practically nil and the cost of operating is very low. I am not likely to part with it until you produce a finer Gray-Dort," says E. W. Bickle, President of Electrical Systems Limited, Toronto.

Let us show you why the Gray-Dort can give this satisfaction.

GRAY-DORT MOTORS LIMITED
Chatham - Ontario

The "Class" of the Light Car Field

TELLS PROPER WAY TO BRING AUTO TO STOP

States Clutch Should Not Be Disengaged Until Speed Reduced.

SHIFT GEARS SILENTLY

Advises Against Decutching For Small Bumps, Curves or Corners.

The majority of motorists—often in compliance with the instructions of car salesmen—decutch before or synchronous with starting to brake. Yet there is not an authority worthy of the name who sponsors this practice or rather malpractice.

The clutch should not be disengaged until the speed of the motor vehicle has been reduced to that at which the engine would propel it with spark and throttle fully retarded.

The correct procedure is to close it, fully retard spark and throttle, apply brakes and disengage clutch when the car or truck has decelerated to the speed its lowest speed on high.

There is much, too much, use and abuse of the clutch—and clutch riding is costly.

"But," objected a motorist whom we had endeavored to cure of bad clutch habits taught by the salesman who sold him the car, "that is wrong, because it is breaking against the engine." Try it both ways, he replied, and see for yourself.

Because some fool salesman told you it was breaking against the engine you accept it as orthodox gospel. As a matter of fact, it is breaking with the engine—not against it. Think it over, or, if that is too much of an ordeal, next time you are on a traffic-clear street, your car moving at say 15 miles per hour, throw your clutch and note how far your car will coast before its rate of speed drops to four miles per hour, the low limit of its high gear performance.

Drives Without Clutch. Then accelerate to 15 miles per hour again, and at the point you started the coast fully retard spark and throttle, and see how far the car moves before its rate of speed is down to 4 miles per hour. Then say whether you break against or with the engine when suiting your action to our advice.

A really good driver can shift from first to second and second to third and back again without touching his clutch, or for that matter, from any forward gear to any other while the car is moving, simply by regulating engine speed, increasing it or decreasing to the right extent in accordance with whether the movement is from a higher to a lower gear or vice versa.

C. E. Hastings, B.Sc., M.S.A.E., of Hastings & Jennings, consulting engineers to the Ontario Motor League, Canadian Automobile Association, the Dominion government, several insurance companies, won a bet in Ottawa during the war while instructor of the M. T. officers training school and adjutant in charge of Canadian Mechanical Transport, from the chief automotive engineer of one of the leading motor car companies that he could start and drive one of the company's new cars without touching the clutch. No conditions were imposed. The engineer had offered to bet the car. After he admitted that he had lost the wager, Hastings said: "Just to impress on you the folly of backing a mere opinion with a big stake I'm going to make you buy me a good dinner at the Chateau and let you keep the car."

Warm Up Engine.

How was it done? The engine was warmed up, then shut off with a rich explosive mixture in the cylinders. Low gear was then engaged, throttle and spark advanced a bit, brakes, of course, released, ignition switch turned on and the starting switch slipped on—and the car moved off in low. The rest of the performance was as already indicated. With the exception of the "starter" start, this was an old stunt with him, dating back to 1910 or 1911. We have never heard him flash gears, even this stunting with so much for that.

But before considering the plain or garden variety of gear shifting, another word or two about the clutch.

By leaving the clutch engaged when slowing down in traffic, the exigency requiring speed retardation has been eliminated in many cases before the car has decelerated to a point requiring re-clutching—and so much wear and tear on the clutch is saved. Don't decutch for very little bump or corner or curve, and never slip the clutch or ride it. In order to shift gears well on all cars under all circumstances, one must have some definite idea of what goes on under the floor boards when pedals and levers are manipulated.

Marks Finished Driver. Silent shifting, without rasping or grinding, is desirable, because it marks the finished driver, but it also indicates that the shifting is being done with minimum of strain on the car's mechanism. Noisy gear changes presage chipped and broken gear teeth, and excessive wear and play all through the driving mechanism right through from clutch to tires.

The value of a silent shift is easy to understand. When the teeth of the two gears about to be meshed are running at about the same speed they may be engaged silently, but if the teeth are moving at widely different speeds when they are meshed they are abruptly brought to run at a common rate, and it is the rasping of the teeth of the two gears

AUTO NOTES.

There are 20,000 motor busses in the United States.

More than 300 cities now have municipal camp sites.

Motor trucks haul 97 per cent of its milk supply into Cincinnati.

There are nearly 1,000 motor truck lines in the United States.

Alberta is the first province in Canada to impose a gasoline tax.

United States leads the world in the export of motor cars and trucks.

Canton, China, has only 24 passenger automobiles.

Rubber for road surfacing is being tried out in Colombo.

Keep to the right at the crest of a hill.

Seven hundred of the 1,630 cars in Alexandria, Egypt, in 1921, were of American make.

While in 1921 fifteen countries owned 97 per cent of the world's automobiles, this year they have only 96 per cent.

Keep the spare tire covered against sun, rain and dirt.

Never leave the car rest on a deflated tire.

TRANSMISSION LOCK.

Locking the transmission of a popular low-priced automobile is a new

way to keep it from being stolen.

This new lock replaces the regular transmission cover, and prevents the engine from starting. The lock does not change the design of the car's mechanism, yet enables it to be moved and steered in case of emergency.

Tommy Milton's eight-cylinder motor in the Indianapolis races used a carburetor for each cylinder.

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Dependable Champions For Every Engine Everywhere

Aid Quick Starting

The firing points of Champion Plugs are special nickel alloy, do not corrode, oxidize, or burn readily, and give an instant spark at each turn of the motor.

Ask your dealer for a full set, no matter what engine you have.

Champion Spark Plug Co. of Canada, Limited
Windsor, Ontario



Type for Ford
Champion X
now 75 cents
Champion A-25
for Fordson
also 75 cents

More than 270,000 passenger cars and trucks were produced by auto manufacturers last June.

New attachment for drive shafts keeps car from rolling down hill. Combination anti-theft lock has been made for the fuel feed line.

Belgium has a motorcycle with a water-cooling system. British motorists are demanding that bicycles also carry rear lights.



Formal Opening
Aug. 19-26

YOU are cordially invited to attend the first showing of our NEW 1923 McLaughlin-Buick Master Six and Master Four Motor Cars in the London show-rooms from Aug. 19th to 26th.

OPEN EVENINGS

McLaughlin Motor Car Co. Ltd.

Subsidiary of General Motors of Canada, Limited

London Branch House:
Bathurst and Richmond Streets

To Holders of Five Year 5½ per cent Canada's Victory Bonds

Issued in 1917 and Maturing 1st December, 1922.

CONVERSION PROPOSALS

THE MINISTER OF FINANCE offers to holders of these bonds who desire to continue their investment in Dominion of Canada securities the privilege of exchanging the maturing bonds for new bonds bearing 5½ per cent interest, payable half yearly, of either of the following classes:—

- Five year bonds, dated 1st November, 1922, to mature 1st November, 1927.
- Ten year bonds, dated 1st November, 1922, to mature 1st November, 1932.

While the maturing bonds will carry interest to 1st December, 1922, the new bonds will commence to earn interest from 1st November, 1922, GIVING A BONUS OF A FULL MONTH'S INTEREST TO THOSE AVAILING THEMSELVES OF THE CONVERSION PRIVILEGE.

This offer is made to holders of the maturing bonds and is not open to other investors. The bonds to be issued under this proposal will be substantially of the same character as those which are maturing, except that the exemption from taxation does not apply to the new issue.

Holders of the maturing bonds who wish to avail themselves of this conversion privilege should take their bonds AS EARLY AS POSSIBLE, BUT NOT LATER THAN SEPTEMBER 30th, to a Branch of any Chartered Bank in Canada and receive in exchange an official receipt for the bonds surrendered, containing an undertaking to deliver the corresponding bonds of the new issue.

Holders of maturing fully registered bonds, interest payable by cheque from Ottawa, will receive their December 1 interest cheque as usual. Holders of coupon bonds will detach and retain the last unmatured coupon before surrendering the bond itself for conversion purposes.

The surrendered bonds will be forwarded by banks to the Minister of Finance at Ottawa, where they will be exchanged for bonds of the new issue, in fully registered, or coupon registered or coupon bearer form carrying interest payable 1st May and 1st November of each year of the duration of the loan, the first interest payment accruing and payable 1st May, 1923. Bonds of the new issue will be sent to the banks for delivery immediately after the receipt of the surrendered bonds.

The bonds of the maturing issue which are not converted under this proposal will be paid off in cash on the 1st December, 1922.

W. S. FIELDING,
Minister of Finance.

Dated at Ottawa, 8th August, 1922.