

IN THE MOTOR WORLD

MAINTENANCE

During the delay in the work of constructing the pipe line for the link as and oll Company at Greentown, Ind., it occurred to me this matter the surface of the highways than the horse and buggy might be procured, so I accordingly laid plans for a mechanically constructed vehicle.

In the fall of 1882 I moved to Kohomo and the following summer (1883) and my plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to begin the actual construction of any plans sufficiently matured to be actual construction of any plans sufficiently fore-yet there are many motorists who give their batteries no atten-tion whatever.

Will Work Always with Care. "The battery is there to start the car, they reason, and start the car it should, at all times under all con-

ditions. This reasoning is correct in a measure. The battery should start the car at all times and it will do so if given half a chance. "It is difficult to realize the amount of power there is in a little storage battery. An Exido battery weighing sixty pounds will give enough power to raise its own weight to a height of nearly six However, to crank an automobile engine, a batery must pro-duce more than one horse power for a few seconds or minutes as demands, therefore the current that is consumed must be replaced if satisfactory operation is to be consistently maintained. "A battery gives no warning when

it is being improperly treated—it works on until the last ounce of strength has been exhausted—then comes trouble and a repair bill. Maintain Service for All.

"It is to eliminate the cost of battery neglect that we make in-spections of batteries of all motors

at all exide service stations. "These tests show at all times whether a battery is being properly charged, and act as a check on the condition of the balance of the electrical apparatus. Already hun-dreds of dollars have been saved for those motorists who have been change was lacking. The farmer was practically isolated—confined to the dull, grinding repetition of the same dreary tasks day in, day out, for year after year. The nearest town was generally too far away by horse to afford more than a rare visit. Social intercourse was stunted by the difficulties, of carrying it on. Is it any wonder boys left the farm?

Today sees a great change No. regular Exide service patrons-and ore are finding their way to the sdom of the course every day."

TRUCK ECONOMY RULES FROM FULTON M. T. CO.

President Melhuish Says Check Up on All Phases.

A list of rules for truck operators issued by William Fulton Melhuish, president of the Fulton Motor Truck Company, manufacturers of the Fulton 14-ton truck: Zone your deliveries. Chart your loading platforms. Don't run motors while the truck

See that you get the best possible nileage from the trucks you are

trip. Cut down your gas at the carburetor

power on.
Check your driver on the shortest
possible route.
Check your drivers against costly

HOW I BUILT FIRST AUTOMOBILE GREATER USE OF AUTO

Gradually Being Recognized as Owner Who Cures Little Motor

national industry has received as much adverse publicity as the automobile business.

COUNTRY OWES GREAT HEAR A LITTLE NOISE?

DEBT TO AUTOMOBILE

Great Economic Force.

Since the invention of the har-

vester and reaper, no single tool or

device has promoted American farming as has the automobile, with its offspring, the motor truck and the farm tractor. And yet, scarcely a

Of course, it is needless to say that

without the motor truck and more especially the farm tractor, produc-tion of those vast "win the war"

tion of those vast "win the war" crops would have been physically im-possible. But you must also remem-

ber that a few years ago it would have been very difficult to have ex-cited our farmers to the pitch of

enthusiasm necessary to raise these

crops in the short time available The farmer's mind has changed, as

well as his methods of working.

Life on the farm was not consid-

ered so dismal nor did the flow of farmers' sons to the city take place without reason. We are a quick-witted, active-minded race, and one

witted, active-minded race, and one of the requirements of our nervous

make-up is a certain degree of change. Before the introduction of the automobile on the farm this change was lacking. The farmer was

Today sees a great change. No longer does the farmer get along with makeshifts when he needs supplies or a machine part. A 100-mile trip to town is no barrier to the

motor-equipped farmer when it comes to keeping his tractor and other farm implements going. In fact, it is in the West, where great farms,

big crops and long distances are the rule that the passenger car makes modern production possible and mod-ern farm life livable.

Heretofore inaccessible neighbors grade schools and libraries are prac-

at the farmer's door.

where we find a quickening of spirit, a great awakening going on on the

Community interests, granges,

g and marketing as-

FIND OUT ABOUT IT

Troubles Saves Expense.

No doubt it is true that in the

past American automobile owners have been very largely inclined to

take a rather happy-go-lucky atti-

ner. That time is past. The average

ditions, and is keenly sensitive to

found to be very small indeed, but

small troubles have a way of ad-

ding complications.

Many a man would be surprised to

the heavy expense of replacing a burned-out bearing or of repairing scored cylinders if he had heeded

he first warning signals of trouble. Another thing that cannot be too

enough oil from time to time to

keep the gauge at three-fourths full. As the oil is used it gradually loses its lubricating qualities: also the low grade of fuel commonly sup-

plied today tends to contaminate the

oil in the case to some extent, no matter what precautions are taken. For these reasons fairly frequent drainage is essential. Every thousand

miles in summer and every five hun-dred in winter is recommended. While the gauge should ordinarily show three-fourths full, when drain-

ing is contemplated wait until it

shows one-fourth full. This saves

ntenance, often unthought of, is

ADVICE TO NEW DRIVERS.

Care Should Be Taken During First

Month of Ownership.

"Take your time during the first month-keep cool and have a reason for everything you do, and above all think-do not forget it-think-and

Think—do not forget it—think—and you will get along all gight.

"Know what each pedal of an automobile is for—know what each button will do—but be sure about it—and do not lose your head. Then

to the crowds. During the learning period drive slowly. Do not speed, Most of the trouble comes from driving too fast.

"Find out all about your car and treat it with consideration. Watch lubrication. You do not go without food for several days, nor should you allow your car to be without sufficient oil and water. Both are Becessary for proper performance.

mecessary for proper performance.

"And remember your car is a piece of machinery. It is not infallible. Do not expect the impossible of it. Treat it with consideration. And it will return uniform service to you."

Los Angeles-Yosemite Run.

Intense as is the rivalry between automobile dealers of the Pacific Coast, true sportsmanship prevails, and the numerous road contests held in the land of sunshine and perernial motoring never suffer from lack of entries.

The recent Los Angeles-Yosemite economy run was contested by the

know that he could have avoided

TIRE REPAIR SCHOOL FOR U. S. SOLDIERS

One of the most interesting and important phases of military activity in and around Akron, Ohio, the rubber tire center of the world, are the United States Army Repair Schools where the young soldiers are given careful instruction in the building and repairing of casings and tubes.

Each month a class of enlisted men puts in four weeks of diligent work in an effort to master the mysteries of tire construction. There are six owner is paying more serious at-tention to his car. Rising prices and wartime conditions have brought about a realization that it is both poor business and poor patriotism to allow so highly organized a me-chanism as an automobile to de-teriorate unnecessarily. Hence, sound advice is eagerly listened to. After a man has driven a car for some little time he becomes thor-oughly familiar with every sound of the mechanism under all conin an effort to master the mysteries of tire construction. There are six hours of work each day. The detachment is under command of Capt. A. E. Aub and is quartered, when not in the class room, in barracks on the campus of Akron University.

When the four weeks of tire study have been concluded, each man must pass an examination of 29 questions concerning tire building and repairing. He is then graded according to his any strange sound that may creep in. Now these unusual sounds are almost invariably danger signals and should immediately be traced to their causes. Sometimes this is

He is then graded according to his proficiency, as shown by his answers to the examination questions. That the young soldiers are unusually good students is indicated by the average standing of the class of June. There were 107 men taking the course at various plants in Akron and the aver-

age grade was 30 per cent.

When the enlisted men first enter
the class they are confronted with a
huge pile of old tires of every variety
—cord. moided, wrapped and so on.
There are also innumerable tires for strongly impressed on the car own-er's mind is the absolute need for proper motor lubrication. This means more than merely adding their inspection and study. After two
or three lectures, the men begin to
tear apart the tubes and casings and
learn what they are made of. Then
comes the actual repair work.
An aged casing, that has been skillfully sepaired until it will estain

fully repaired until it will again ren-der service, is subjected to terrible abuse until the average layman would pronounce it fit for nothing but the scrap pile. This casing is turned over scrap pile. This casing is turned over to a couple of students and they are told to repair it so it can be used again. The results are often so re-markably well attained that they are amazing. of such men is the U.S. army's

undue expense.
One other very simple rule of maintenance, often unthought of, is this, "Go over the body bolts occasionally to see that they are snugged up tight. This takes but a few moments, prevents rattling, and as a result adds considerable to the life of the body of the car.

AUTO NOTES.

America is traveling a fast pace, geared into the winning stride necessary to make a victorious peace for her and her allies. Extensive plans and intensive actions to carry them out successfully are the rule of the day. The conservation of time, a vital necessity in the race or peace, is made possible by the sutomobile and motor truck. made possible motor truck. H. H. Mundy, local manager in Chevrolet automobiles, in discussing the trials of new drivers has this

The motor car's adaptability to de-pendable and speedy individual trans-portation is solving the question. How can I increase my personal effi-ciency and economize on my time? for the busiest men and women of every community. onmunity,
The motor truck, by successfully shouldering the railroad's short haul

you will not get into any trouble. "Early morning is the best time to learn the first stages of driving. Go slowly and keep to the right. Get in the habit of watching for vehicles both on the street you are driving, and on the cross streets. Addison Smith Co. 1001 Rhode Island Ave. streets. "After a short period, when you feel satisfied you have mastered the elementary things, drive later in the day when traffic is heavier. But be careful. This will accustom you to the crowds. During the learning pariod drive sleaving To not speed.

Best Grades of Oils, Grease, Etc.

Gasoline, 25c

AUTO ACCESSORIES

EVERYTHING FOR THE AUTOMOBILE

Tires, Pumps, Spark Plugs, Horns, Mirrors, Lenses.

OUR SERVICE Cannot Be Excelled

Addison Smith Co. 1001 Rhode Island Ave.

GREATER USE OF AUTO
URGED IN LIEU OF RAIL

Work with Recreation Makes for
Economy, Dealer Explains.

"One things that has lately impressed me very deeply is the win-the-way of the print of useful way. The spirit of useful week in a prominent of dealer in a recent interview. "The spirit of useful week instead of friviolus summer-time, play very observed on the summer of the spirit of useful work instead of friviolus summer-time, play very observed."

"This more than ever conditine in the seemal's accepted sense of the term, is non-existent for the very application of which he poured into the summer planning some sort of relaxation, for while they do not feet that they can just sever all business connections for even a few days, they realize that all work and absolutely no play it was the print of the summer of the sum

Firestone

The experience of every nation that has engaged in a great war shows that returning soldiers, after their vigorous military life, usually prefer and seek out-door occupations. A large number, of course, return to attendant is necessary except in cases. The pan holds seven gallons, and one has a contact with the fire ploy one ambulance driver for one pot so that evaporation is vety rapid. Water is supplied through a pipe, the may be assumed that the vehicle is flow being governed by a float-contact which are possible to the part of the pan holds seven gallons, and one has even gallons attendant is necessary except in cases

Jack Rabbits, Formerly A Pest, Now a Resource

Cheyenne, Wyo .- The lowly jack rabbit, heretofore considered Wyom-ing's worst pest, may become the State's grtatest natural resource, not far from here. State's gratest natural resource.

Eastern capitalists are building in Cheyenne and Casper two great cold storage plants to be occupied exclusively by the carcasses of jack rabbits. The plants will store each 2,000,000 rabbits. The backers of the plan are arranging for fall rabit drives throughout the State. The meat drives throughout the State. The meat will be stored and shipped back to Eastern cities where jacks are considered a delicacy.

A child was born to this family recently. The husband was alone in the some when the State enumerator called. The mother wanted the charge and the conformation of this family recently. The husband was alone in the conformation to this family recently. The husband was alone in the conformation of the state enumerator called. The mother wanted the child to have to carry another through life. The state of the conformation of the conformat

Does War Cause Fear in Animals? | wishes. An English writer has made some interesting studies of the behavior of certain animals under war condi-

tions. From him we learn that par be relied upon to give warning of an approaching aircraft at least twenty minutes before it could be seen by the naked eye. These birds, however, grew "bored" after a while and ceased to be dependable. Pheasants, too, were wont to give warning at night when an airplane ap-proached, screaming and chattering noisily. It is also stated that hares, noisily. It is also stated that hares, partridges and pheasants were aften observed near the front line trenches in search of food—which they got if the rats didn't see it first. It would seem that the war has no effect on seem that the war has no effect them.—Popular, Science Monthly.

An extra large water pan, illustrated

in the Popular Mechanics Magazine,

Parents Appeal to State To Settle Child's Name

A child was born to this family

State Department of Vital Statis asking that the child's name changed so as to conform to

State officials have failed to unearth any law authorizing such How Widows Get Credit in Stores.

There is an article in the American Magazine on "Who Should Get Credit." The author says: "Widows comprise a difficult prob-

lem for every retail credit depart-ment. You can't ask a widow what her husband's occupation or salary is. Maybe she lives in a boarding-She is unemployed, and has not established credit at other stores in the city. She may have independent means, or she may be an adventuresss. Even if she had every intention of paying her bills, a woman's desire for clothes often destroys her sense of balance. "What is a credit man to do in the

case of a widow? He can ask her for names of her acquaintances, who may serve as refereces. Or, if she has not been in the city long, he can ask where she dealt in the city, where she lived before. In fact, where she lived before. In fact, if he can learn where she came from, and he has to do is to get in touch with the retail credit as-sociation there. If she had credit at stores in that city and paid her bills promptly-or didn't pay them her record is on file."

Giant What is back of a great success THE Firestone Giant Truck Tire and the Firestone Cord Truck Tire are the two advanced examples of what tire-building science has done for heavy-duty trucks. These two tires would never have been built without the steps of superiority which brought Firestone Tires to the fore at the beginning of the industry, the steps which first provided every type of tire and a Firestone Tire for every duty, light or heavy, on every road. Length of service, economy of service and satisfaction of service have all established the worth of these tires. And this applies to Firestone Cord and Fabric Tires for passenger cars. Firestone Rims, every Firestone product. Firestone Giant Solid Truck Tire has extended the field of heavy trucking to work that cannot be done on tires of ordinary construction. Firestone Cord Truck Tires have brought pneumatic advantages to trucks of large capacity. Speed more than ever is a necessity in business today. Firestone Cord Truck Tires give you added speed. There is a Firestone expert near you who will give you counsel on your needs. Call him in. FIRESTONE TIRE AND RUBBER COMPANY 824 14TH STREET, N. W. WASHINGTON, D. C. Home Office and Factory: Firestone Park, Akron, O. Branches and Dealers Everywhere Firestone **Cord Truck Tires**

business, shipping and marketing as-sociation-all sorts of organizations for the improvement of farm life-are springing into being. It is this new rural life that is making pos-sible the American farmers' spienlay-ups on account of truck abuse. Don't give your truck both fists at did war contributions of produce and once by specdig when overloaded. That's where the road shock hurts. Mr Melhuish says the foregoing rules were meant for the owner who Who has the imagination to picture the future of the farmer when American crops, carried in American ships, feed the world? Who can wants to get the most out of his truck at any time, but especially now, when economy counts for so much. foresee the tremendous development of which our country is capable when

The store "ads" give you information about the store's offerings—up to the hour and dollar-saving information. Do you want to deal with merchants who prefer to withhold this information from you? of which our country is capable when the farmer comes into his own in every phase of his life? And who every phase of his life? And who the store in the farmer comes into his own in every phase of his life? And who the store in the farmer comes into his own in every phase of his life? And who the store into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the farmer comes into his own in every phase of his life? And who the ev

NEW CLEAN STANDARD MAKES

WORLD'S GREATEST CUT RATE TIRE CONCERN Beacon Griffith Goodyear Goodyear Guaranteed Tubes, Special "Special

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31x4 Non-Skid STANDARD \$20.60

Automobile Tire Con ED C. GRIFFITH, Preside

902 14th St. N. W., Washington, D. C. "BUY WAR SAVINGS STAMPS."

The recent Los Angeles-Yosemita economy run was contested by fifteen different makes of cars, ranging in cost up to \$3,750. These were divided into three classes, according to price, and the winners determined upon a ton-mile basis.

Not one of the entries failed to hans up a gaseline record of less than fourteen miles to the gallon over the 370-mile stretch.

The average gasoline mileage for the fifteen contestants in the Yosemite run was 21.29, and the average price of the cars \$1,650. Many pink flowers may be turned lue by exposing them to the fumes f ammonia for a few minutes,