

Three Days

JANUARY 19, 20, 21

40 Cars to be Sold Regardless of Cost

ROADSTERS, TOURING CARS AND TRUCKS. BUY NOW AND SAVE MONEY

Three Days

JANUARY 19, 20, 21

SALE SPECIAL

Chevrolet Touring Car worth \$400.00, starts at \$225.00 and drops \$25.00 a day until sold.

Terms can be arranged. Don't fail to see this one.

SACRIFICE SALE ON USED CARS

Your Own Price

Your Own Terms

H. MERTEN

206 N. JACKSON ST

BUICK SIX

Taken in at \$800.00. Sale price \$350.00. Easy terms.

Many others at prices never before heard of.

NEW CAR NEEDS CAREFUL NURSING

Life of Car Depends Much on Early Attention.

Many Things Are Necessary to Be Done in First 1,000 Miles—Proper Greasing and Adjustment of Nuts Important.

To maintain a car in good running order so that it will give long service at minimum expense means that it

must be given systematic attention, especially during early life of the car. There are many things to do, the most necessary of which are the following: Tighten all nuts and bolts after the first hundred miles of travel; drain oil from crankcase and replace with fresh oil after first 500 miles; after 1,000 miles drain oil again, pour in about a quart of fresh oil, run the engine a few seconds and again drain, then remove oil pan and clean with kerosene, replacing after cleaning and refill with correct amount of fresh oil. Travel no faster than 25 miles per hour the first 1,000 miles, as engine is stiff and bearings must be worn in slowly; otherwise a noisy engine will result. Watch oil and gasoline gauges

carefully for any defect in systems; check up on valve, timer and carburetor adjustments frequently, always keeping the leanest possible carburetor mixture; jack up wheels and test for looseness by shaking, and if there is any play readjust the bearings; use good oil; keep tires fully inflated; don't race the engine when the car is standing; keep cooling system filled with water and see if water is circulating; if not, examine pump and hose connections to radiator, and when cleaning the car, which should not be done frequently until the varnish has hardened, do not use a strong stream of water and do not rub away dust with a cloth. Washing with a slow stream of water is the best.

HOW TO DETECT DECAY IN TIRES

Signs of Old Age Much Like Those in Men.

Wrinkles and Cracks in the "Skin" Show Casing is Getting into "Senile" Stage—Care in Storing.

When numerous small slits and cracks appear in a tire it is a sign

of the approach of old age. Auto casings in this respect are like men and women. Although they don't get gray haired, they do become wrinkled and cracked, often chalky white in appearance.

The fabric in an old tire gradually becomes brittle and hard, so that it breaks easily. Like the bones of old people, it is difficult to knit. The tire surgeon's work increases in difficulty with the age of the casing.

Those whose strength is conserved do not so readily show their age. The best way to preserve their usefulness is to take care of them. To hide the effects of age and wear motorists frequently "hold them up," painting the

side walls and washing with cleaning solutions. Others pay no attention to their appearance and permit them to go shabby.

Ordinarily the small cracks appearing on the side walls do little harm unless they penetrate through the rubber covering to the fabric underneath. It is well worth the motorist's attention to have his casings regularly inspected.

Tires age fastest when lying around. They are kept in best condition in actual service. If it is necessary to store them they will retain their life longest in an even and moderate temperature and light.

Every motor vehicle in Spain, must be equipped with a silencer.

A tire will "give out" more overloading than from almost any other cause.

The Free City of Danzig, with a population of 350,000, has no motor vehicles.

Truck tractors used with trailers are registered as motor vehicles in Pennsylvania.

New York city has been issued 243,000 license plates for automobiles for 1922.



Ignition, Lighting and Battery Experts.

Graduate Electrical Engineer

ROSEBURG BATTERY & ELECTRIC STATION

PHONE 489

"THE HOUSE OF A SQUARE DEAL"

A SIZE FOR EVERY CAR

DISTRIBUTORS FOR

DOUGLAS AND COOS COUNTIES

SERVICE CAR

NOISY GEARS MEAN DANGER

Tell Story Owner Ought to Interpret in Terms of Dollars and Cents.

LACK OF OIL CAUSES TROUBLE

Study of Rear Axle Construction and of Transmission Would Save Owner Much Trouble and Some Money.

It is a fact that a great number of our cars are being driven over the roads with noisy gears. This is being done either through ignorance or in direct defiance of that well established rule "a stitch in time, etc." The noise of the gear besides being unpleasant, tells a story which the owner ought to interpret in terms of dollars and cents. Without knowing anything at all about a rear axle or a transmission, the average man should be able to know the difference between a rear axle that is normal and one that is not. He may not know the exact cause of the trouble or the manner in which it may be remedied, but he certainly ought to be able to determine if it needs the attention of a mechanic. The reason for this immediate interpretation is to save the owner money, for, like a case of pneumonia developed from a mere cold, if attention were given early enough, the serious ailment would not have developed. So with gears. Once their bearings begin to wear and so throw the gears out of their relative running truth, the gears themselves are affected so that if the condition is allowed to get worse, pretty soon the gears cut and chip and then fall altogether.

Two Out of Five Noisy. Observations were made at one spot along a frequented highway, where for hours an average of 1,000 cars per hour passed. A fairly accurate check was kept on gear noises on a level stretch and without exaggerating, every two cars to five had noisy rear axles. It is doubtful if the owners of the cars realize the meaning of such noise, and if they know that in 50 per cent of the cases the condition can be corrected for a few dollars, perhaps requiring only hearing adjust-

ment, shifting of the differential, a quart or so of oil.

The rear axle is not the only offender. The transmission gears need the same protection, but usually they are not at fault.

In order to understand just how noisy gears come into being, one should study the rear axle construction. The driving pinion at the end of the propeller shaft is mounted usually on two bearings. This pinion meshes with the large or ring gear of the differential unit, the unit itself being mounted on two bearings which rest in the differential housing. In order that the ring gear and the pinion do their work without noise the teeth of these gears must mesh properly. If the correctness of the mesh is destroyed then noise results. Should the pinion shaft (hence the pinion itself) move relative to the ring gear the tooth contact is at once changed and you get noise. The noise is not necessarily a steady one, but it may be interrupted, due to the fact that the new areas of contact of the teeth are not all alike. There may be a high spot on one or two or more teeth and when these high spots are struck the noise changes.

Lack of Lubrication.

The pinion bearings may be of the ball or roller type and there is, in most cars, a means of adjustment of the bearings after they have been worn slightly. The cause of the wear may be natural, but in nine out of ten cases it is due to lack of lubrication. The differential bearings are not unlike the pinion bearings in the effect they have on gear noises. These bearings if worn even slightly will allow the whole differential unit to shift sideways and so disturb proper gear mesh. Once they start to wear and permit this action, the wear is rapidly accelerated so that in a very short time there is no definite tooth contact.

The time to stop the gear noises is immediately they appear. It is cheaper for you and better for the car.

WOMEN DRIVE HEAVY TRUCKS

Miss Mary Mahood and Mrs. Bogardis Take Big Vehicles Safely Through Crowded City.

During a "less speed" campaign conducted recently by the Keystone Motor club, in Philadelphia, Miss Mary Mahood and Mrs. A. L. Bogardis, drove two five-ton trucks through the center of the city with perfect safety. Miss Mahood has been driving all kinds of cars from the time she was sixteen years old.

ESSEX

Endurance is Almost Doubled

No casual acquaintance could create the bond of esteem owners hold for Hudson and Essex.

It has grown through an intimate companionship in steadfast service. It has thrived in weeks and months that brought no disorders or disappointments—no requirements of attention.

Is it remarkable then that this friendship is so manifest it causes comment everywhere? You too have observed it. And all might covet an ownership that has so many substantial elements of satisfaction.

What owners know of Hudson and Essex has put all concern about the car from mind. So far as certainty of destination is involved the Hudson or Essex owner commits himself to a journey across town or across continent with equal serenity.

And then never before was Hudson and Essex price advantage over cars of comparable quality so striking as now.

H. MERTEN

Motor Cars and Tractors

ROSEBURG, OREGON.



HUDSON

WIRE DEFECTS CAUSE TROUBLE

Welfare of Automobile Depends to Large Extent on Good Wiring.

NEEDS CAREFUL ATTENTION

Owners Should Familiarize Themselves With Electric System of Their Cars—Dim Lights Are Warning of Trouble.

The wiring of an automobile is its venous system and owners ought to familiarize themselves with the troubles that poor wiring brings about.

A great many of the complaints currently borne by the storage battery, the generator starting motor, and lamps are largely traceable to the wiring between these units.

The first thing to do when the lights grow dim and the starter is weak is to test the battery solution, and if its gravity is 1.280 or better then the battery is all right. Since the battery feeds at speeds usually below 15 miles an hour and the generator takes the whole load above that speed, if the lights are dim below 15 miles an hour suspect the wiring; the feed out of the battery, in other words.

Due to Bad Connections.

Frayed insulation at the terminals often allows a strand of wire to get loose and touch another wire or contact point, and you immediately notice a slight irregularity in ignition or lighting. In the average car the electrical connections are in a bad place—behind the instrument board—and you must either remove the board or fess underneath and take a chance on trying to feel the trouble. The charging current travels through the ammeter, if there is one. A bad connection at the meter opens the circuit and the guardian of the whole system is put to sleep, which means you don't know whether the battery is getting food or not.

A car is driven over all sorts of roads in all kinds of weather, and naturally water and dirt will get onto the parts. The wiring housed in a frame channel or on the engine side of the dash is not excepted. On a rainy

day the fan draft carries in the engine compartment and the cables get their share. This for many months and then soon soak up enough moisture to become constantly wet, hence continual trouble.

Should Be Protected.

In order that current flow be uninterrupted, it is necessary the wires be properly protected that the terminals be clean and cure. A loose connection is a low of the full measure of flowing all the time.

One loose ignition wire or the operation of the engine will corroded terminal might stop the engine, prevent the starter from turning and the lights from burning. The electrical wiring in your car rarely gives any trouble because well protected.

In the automobile much of the wiring is not so protected, but it can get equally good results by providing substantial coverings of cable and terminal so as to keep the trouble makers—water, dirt, an occasional inspection and the will defeat the effects of the which is inevitable.

AUTOMOBILE NEWS

When oversize tires are to be the car owner should be certain there is enough clearance between the tires and the nearest part of the car.

Hold your hand over the brake tube occasionally while the car is running to see if air is passing in the breathing tube gets clogged by a back pressure on the pistons which reduces the power of the motor.

The engine of a car that has been on the road for two or three years should be apt to give better service and efficient delivery of power if it is used that is heavier than the one which was originally installed.

A bill recently introduced in Iowa provides for more reciprocal trade with foreign countries.

There are twice as many garages in New York city as there are in any other city in the United States, and almost as many repair stations and repair shops as there were blacksmith shops.