

CHANGE OF OIL TO SAVE MOTOR

Official of Large Motor Truck
Concern Urges Practice as
Protective Measure.

KEROSENE QUITE INJURIOUS

Little Chance of Changing Quality of
Gasoline, Therefore Variation of
Lubrication Frequently is
Strongly Advocated.

A campaign to call attention to the necessity of changing oil in motors every so many hundred miles has been advocated by M. L. Pulcher, vice president and general manager of a prominent motor truck company. He contends that failure to change oil frequently is the main cause of the deterioration of motors.

Mr. Pulcher points out that there is so much kerosene in gasoline today that it has a tendency to run down past the pistons, get into the lubricating oil and thin it. The kerosene cuts the thin film of oil on the wearing surfaces of the pistons, piston rings and cylinder walls.

Bugbear of Inefficiency.

With the film of oil on the wearing parts of the motor broken, friction, the bugbear of motor efficiency, starts in. The pistons work up and down through broken films of oil in a lubricating substance that has lost considerable of its richness and thickness.

There is little chance of changing the quality of the gasoline. Therefore, to prolong the life of the motor the only thing to do is to change the lubricating oil frequently, possibly every 500 to 1,000 miles, he advocates.

An experiment witnessed by Mr. Pulcher recently is instanced by him as proof that it is the nonlubricating qualities of the oil that damage motors.

Result of Experiment.

A motor was brought into a shop with almost .015 inches wear. The motor was ground to .020 inches over-size, fitted with new pistons, put on the block and filled with good, clean oil. The motor was then run continuously for 60 hours and during this time the oil was changed three times. When the motor was taken down it showed no wear.

The motor was again put together, oil was taken from an old truck and the motor was put through the same 60-hour test without any change of oil. It showed .005 inches wear, indicating that it is the nonlubricating qualities of the oil resulting from the kerosene working past the pistons and mixing with it that cause the deterioration of motors.

The age of a motor may almost be said to depend upon the number of times the oil is changed in it.

SHIFTING GEAR ON NEW CAR

Difficulty May Be Due to Slight Dragging in Clutch—Little Practice is Necessary.

When a car is new and the owner is not accustomed to driving it, there is often difficulty in shifting into intermediate gears, either from low or high. This may be due to a slight dragging of the clutch, or more often to the fact that the driver is not familiar with the speed of the motor at which the shifts should be made. A little practice is all that is needed.

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LET US SHOW YOU

NO HUNTING ALLOWED.

We the undersigned property owners will positively prohibit any hunting on our premises as well as trespassing. This action is taken by us on account of the great inconvenience caused by hunters molesting stock and leaving gates open.

"Signed"

August Frei
Lawrence Uptmor
Mrs. Georgia Uhl
H. H. Uptmor
John Jungert
T. F. Moughmer
John Voskuhler
Louis Abbl
Fred Ledford
David Halter
Henry Forsmann
W. B. Moughmer
Lorenze Uhlring
Kasper Sprute
Eusebius Frei

B. H. Gehring
Theo. Gehring
George Gehring
Henry Rehder
John Nuttman

Notice For Publication

Department of the Interior,
U. S. Land Office at Lewiston,
Idaho, September 8, 1920.

Notice is hereby given that Joseph Frost, of Spring Camp, Idaho, who, on October 28, 1915, made Homestead Entry, No. 06335, for SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, & W $\frac{1}{2}$ SE $\frac{1}{4}$, Sec. 17, & W $\frac{1}{2}$ NE $\frac{1}{4}$, & N $\frac{1}{2}$ SE $\frac{1}{4}$, Section 20, Township 29 North, Range 2 West, Boise Meridian, has filed notice of intention to make three year Proof, to establish claim to the land above described, before the Register & Receiver of the U. S. Land Office, at Lewiston, Idaho, on the 19th day of Octo-

ber, 1920.

Claimant names as witnesses:
Jefferson S. Busick, George J. Smith, Herman B. Eberhardt, Edward M. Nissen, all of Boles, Idaho.

HENRY HEITFELD,
37-5 Register.

FAST MAIL.

The Cottonwood Hardware and Implement Co., has on hand a shipment of Fast Mail hard oil and can take care of your wants immediately in this splendid grease.

Haul your grain in bulk and save money, grain beds at \$65.00 \$75.00 and \$85.00. Hoene Hardware. 35-tf

A most convincing argument in favor of Tip Top is the increasing list of prominent users whose satisfaction is our best advertisement. 35-tf

COTTONWOOD DRAY AND TRANSFER LINE

ROBBINS BROTHERS PROPS.
Light and Heavy Hauling Done on Short Notice

Simon Bros.

Wholesale and Retail
BUTCHERS
Dealers in Hides, Pelts, and all kinds of Poultry
COTTONWOOD, IDAHO

PUBLIC SALE

Having decided to reduce my farm equipment I will sell at Public Auction two and one-half miles north of Cottonwood on what is known as the old Henry Bieren ranch commencing at ten o'clock, on

Monday, October 4th

10 HEAD OF HORSES



One brown mare, 8 years old, weight 1200 pounds
One black horse, 5 years old, weight 1150 pounds
One bay horse, 8 years old, weight 1150 pounds
One bay horse, 3 years old, weight 1300 pounds
One bay buggy team, 11 and 12 years old, weight 1800
One black mare, 11 years old, weight 900 pounds
One bay mare, weights 1050 pounds
One bay mare, weight 1200 pounds
One, one year old colt

15 HEAD OF CATTLE



Four milk cows
One cow going to be fresh soon
One two year old heifer
Three one year old heifers
One one-year old steer
Five steer calves from last spring
**Thirteen head full blooded
Shopshire Sheep**

Farming Machinery, Household Goods

1 3 $\frac{1}{2}$ -inch Winona wagon with grain tank	1 four horse power	1 set of shaves for single horse
1 3 $\frac{1}{4}$ -inch wagon	1 3-section steel harrow	1 cistern pump for ten foot well
1 14-inch Molene gang plow, extra shears	1 8-foot Van Brunt single disc drill	1 feed rack
1 14-inch J. I. Case gang plow	1 John Deere double row cultivator	Some junk iron
1 18-inch Oliver sulkey plow	1 set of sleigh runners	1 Round Oak range almost new
1 5 $\frac{1}{2}$ -foot double disc harrow	1 set of fancy buggy harness	1 hallow wire system gas lights
1 DeLaval separator	3 plow harness	1 fancy front room hanging lamp

A Big Free Lunch Will Be Served At Noon

TERMS: All sums of \$20 under, cash. All sums over that amount 6 months' time will be given on bankable note bearing 10 per cent interest.
NO PROPERTY TO BE REMOVED UNTIL SETTLED FOR

Peter Bieren, Owner

Harry C. Cranke, Auctioneer

First National Bank, Clerk