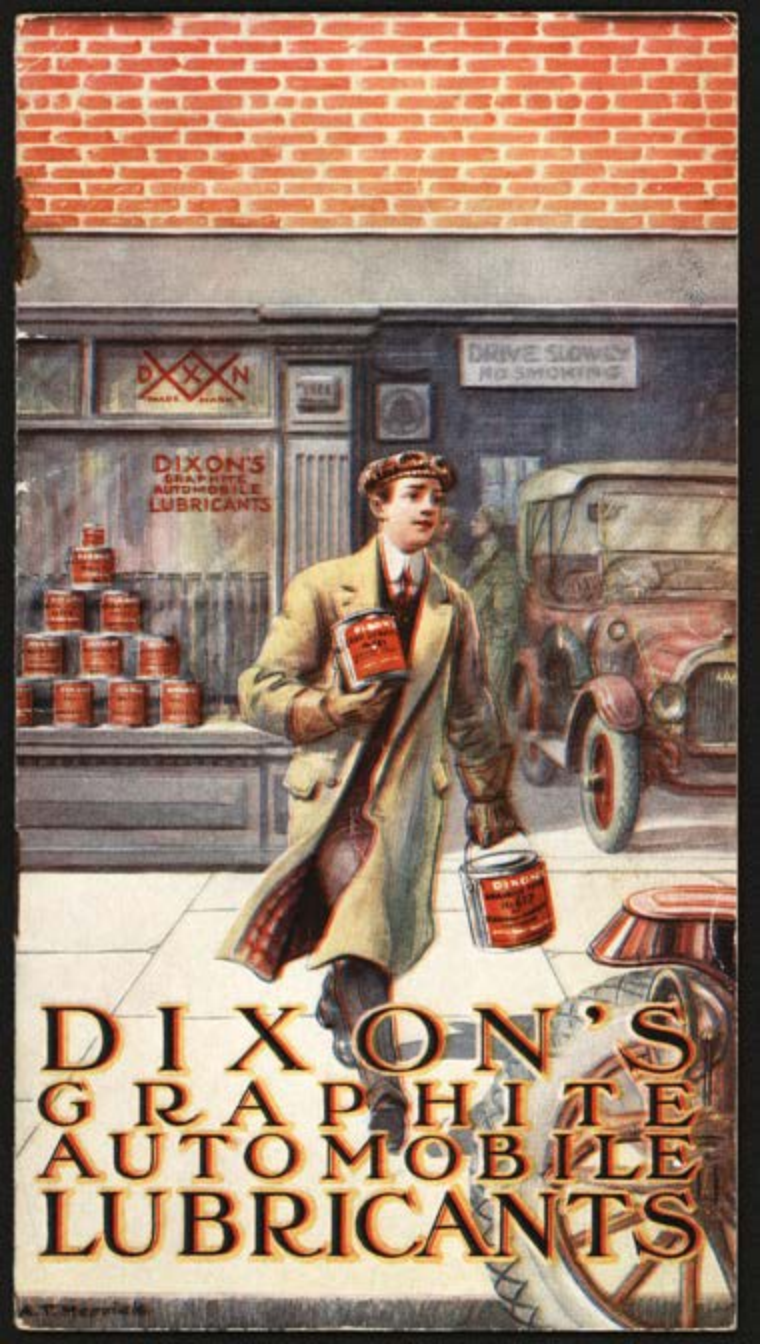
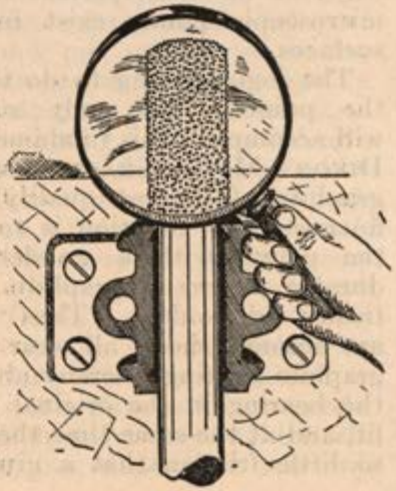

DIXON'S
GRAPHITE
AUTOMOBILE
LUBRICANTS
DRIVE SLOWLY
NO SMOKING
DIXON'S
GRAPHITE
AUTOMOBILE
LUBRICANTS
A. T. Merrick

GRAPHITE LUBRICATION

Mr. Car Owner, may we have your close attention for a few minutes? If our remarks are rather pointed, it is for the purpose of saving time and to better hammer home a few important truths.

Most motorists realize that there is a vast difference in lubricating oils and are careful to purchase a brand specially prepared for the purpose, for they know it is wise and economical to use only high grade oil in engines.

But few are as particular about the grease used in other parts of their cars. Time and again, we have heard men rush into a store and say "Give me a can of grease, quick," and accept any old thing the dealer sees fit to give them. No doubt they own a high-priced car, a fine piece of machinery that deserves decent attention, but they will slap in "any old kind of grease" and let it go at that. Is it common sense?



Apparently they have never stopped to consider why good lubricants are essential.

Metal surfaces may ap-

pear smooth to the eye and may feel smooth to the touch, but a microscope will disclose hundreds of minute irregularities which cause the surfaces to appear like nutmeg graters.

When bearings are in motion the minute points interlock and cause a retarding and wearing-out effect, known as friction. That is why it is impossible to run machinery without lubrication of some kind. Oil or plain grease interpose a film between the rubbing surfaces and thereby tend to "float" the bearing, but the film is extremely thin and delicate, is constantly breaking and does not entirely overcome friction. Eventually the bearings become worn, no longer fit snugly, and during all that time extra gas has to be burned in the engines to overcome the unnecessary friction. The better the grease, the better the lubrication will be, but it will always be far from perfect so long as the microscopic points exist in the bearing surfaces.

The logical thing to do is to eliminate the points. The only substance that will accomplish this fundamental service is DIXON'S MOTOR GRAPHITE, a selected flake graphite of highest quality and extreme fineness. Its function is to smooth over the points with a wonderfully smooth, durable veneer of graphite, that is practically frictionless. Thus two purposes are accomplished; all wear comes on the graphite coating, thereby always retaining the bearing in the original condition and fit, and at the same time the car runs with so little friction that a given amount of

gasoline will produce more power or mileage.

DIXON GRAPHITE GREASES are compounded in such a way that they will always maintain the desired veneer of flake graphite on all rubbing surfaces. Bearings thus scientifically lubricated run cool and quietly, irrespective of speed or temperature. Dixon's Flake Graphite will not pack or ball up because this peculiar form of graphite flake will not adhere to itself.

But some dealers do not recommend even Dixon's Graphite Automobile Lubricants. Why? Because it is possible to buy lubricating greases for three cents a pound and sell them for twenty cents a pound. The profit is tempting. *We make the highest priced, highest graded line of automobile lubricants on the market, and dealers who are in business to stay, who sell real service, know and recommend Dixon's Graphite Automobile Lubricants.*

A special grade is designed for each part of the car; don't put cup grease in the gear box or gear grease in cups. Specify what you need and see that you get it.

The Dixon Company have established a wonderful name for lubricating graphite and other producers of graphites are trading on this Dixon reputation. Get Dixon's Graphite Lubricants and you protect yourself against the cheap greases that *can't* make good. "Dixon's *will*."

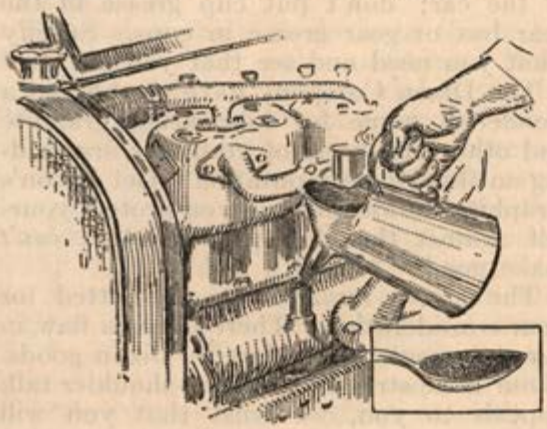
The above remarks are submitted for your consideration. There is not a flaw in our argument, not a flaw in Dixon goods. If our little straight-from-the-shoulder talk appeals to you, we trust that you will

accept the suggestions and learn for yourself the difference between correct and slipshod lubrication. If you are not sure what grades are required, give us the name, year and model of your car, and our lubricant experts will be pleased to make proper recommendations.

MOTOR GRAPHITE

Put up specially for motor cars, motor boats and motorcycles. Use it in cylinders, on chains, springs, tires, wheel rims, bearings and wherever friction occurs. May be used dry or mixed with oil or grease as required. Its use eliminates friction and wear of parts and increases power. Try it in place of talc in tires.

Dixon's Motor Graphite is unique among lubricants. It is not a competing product with oil or grease, but the lubricating value of any oil or grease is always increased where it is possible to add the correct amount of Motor Graphite.



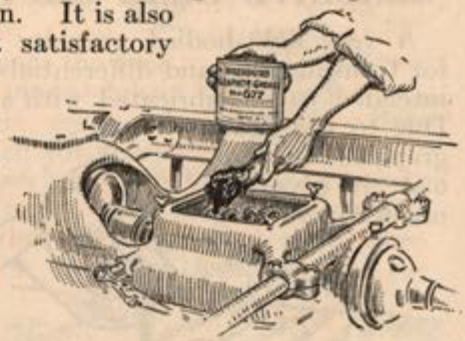
When properly used in cylinders it improves the compression, increases power, prevents valves sticking or pitting, greatly reduces the amount of lubricating oil required, and cures smoky exhaust.

It will not carbonize.

Sold in one-half, one and five pound cans. Larger packages if desired.

GRAPHITE TRANSMISSION AND DIFFERENTIAL GREASE No. 677

A graphite grease of medium density to be used in all transmissions and differentials except those designed for light oil lubrication. It is also the most satisfactory lubricant for electric gear shift mechanisms and reverse gears of power boats.



Another field where No. 677 has found favor is for filling the change-speed gear case and the wheel and brake hubs of motorcycles.

No. 677 is the standard with practically every racing driver because it furnishes dependable and efficient lubrication that can be obtained with no other grease. There is nothing like it on the market.

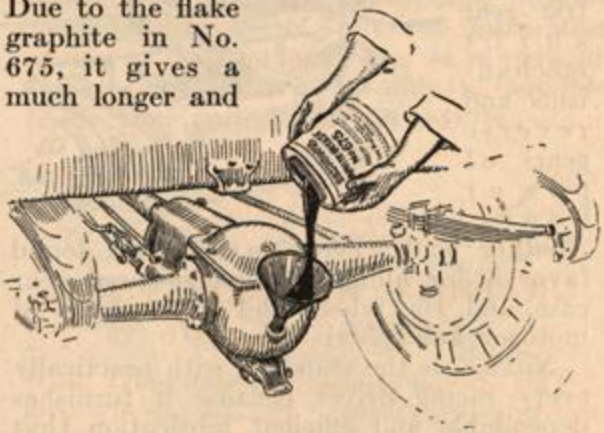
It flows with the gears at all temperatures, yet possesses the peculiar property of

not running off the gears when the car is not in operation. It reaches all the bearings and provides a graphite coating that prevents the wear of parts, reduces friction and causes cool running at all times. If the bearings are close-fitting so that the grease cannot leak from the case it will last far longer than any other grease, because the parts remain so cool that the grease does not waste away. It may be injected by means of a grease gun.

Sold in one, five and ten pound tins. Larger packages if desired.

GRAPHITE GEAR OIL No. 675

A very light-bodied graphite lubricant for transmissions and differentials that are intended to be lubricated with a light oil. Due to the flake graphite in No. 675, it gives a much longer and



better service than is possible to a plain lubricant of the same density.

Sold in five and ten pound tins. Larger packages if desired.

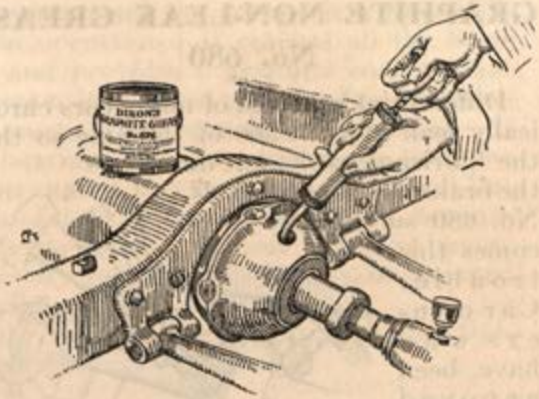
GRAPHITE NON-LEAK GREASE No. 680

Differential housings of many cars chronically leak at the ends of the axle so that the lubricant works out on the brake bands and wheels. No. 680 successfully overcomes this trouble. Car owners who have been annoyed by leaky housings will appreciate the merits of this unique lubricant. This grease is not intended for transmission cases nor even for general use in differentials, for it is a special adhesive lubricant that is to be used only when No. 677 or No. 675 will not do the work.

Sold in five and ten pound tins. Larger packages if desired.

GRAPHITE HEAT-RESISTING GREASE No. 676

This special grease possesses great heat-resisting properties. It is especially well adapted for universal joints, water pump cups, overhead valve cups and clutch thrust collars. It positively will not melt and run out. This grease should *not* be used on gears.



Sold in one, five and ten pound tins. Larger packages if desired.

GRAPHITE CUP GREASES

Cup Greases containing fine flake graphite reduce friction to a minimum. By using these high grade graphite greases the bearings soon acquire the well known graphite polish that eliminates friction and causes easy running. Use in all grease cups, also in wheel spindles, universal joints, etc.

In hot climates use Dixon's Graphite Cup Grease No. 5; in moderate and cold climates use No. 3. The consistency of each grade changes but little under wide temperature variation.

The importance of attending to the numerous small bearings and moving parts of cars is frequently overlooked. Wherever you see a grease cup don't think it is put on as an ornament, but give it a turn once a day or once a week according to the requirements. Don't forget to fill them with grease occasionally.

Sold in one, five and ten pound tins. Larger packages if desired.

GRAPHITOLEO

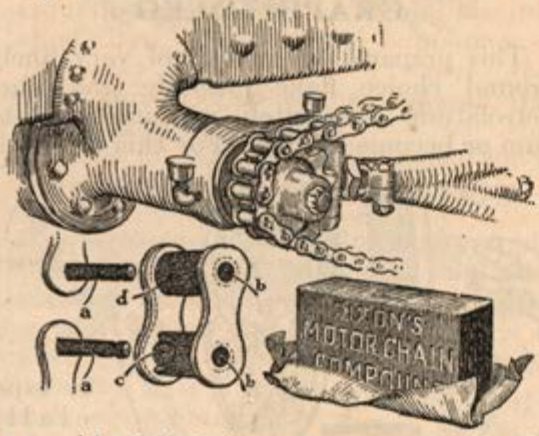
This preparation consists of very finely ground choice flake graphite and pure petrolatum. Absolutely warranted not to gum or become rancid. For this reason it

is especially valuable for packing wheel spindles and steering gear housings of automobiles, and the wheel and brake hubs of motorcycles and bicycles. A single application of this lubricant lasts a long time.

Dixon's Graphitoleo is packed in eight ounce collapsible tubes, also in one, five and ten pound tins. The collapsible tubes are very convenient for automobile use.

GRAPHITE MOTOR CHAIN COMPOUND

The best possible way to treat driving chains, is to first thoroughly clean them with kerosene or gasoline and then immerse them about twenty minutes in a bath of Dixon's Motor Chain Compound. This bath is obtained by melting a sufficient quantity of the compound in a large flat pan. Move every link of the chain so



as to aid the lubricant to penetrate to the pins and rollers, after which the chain should be hung up to cool. The compound may be used repeatedly.

The treatment described insures thorough internal lubrication, every bearing surface being reached and provided with a graphite coating. Rust and wear are prevented and dust and dirt do not get a chance to accumulate.

Sold in cakes weighing about three pounds each.

GRAPHITE PIPE-JOINT COMPOUND

Dixon's Graphite Pipe-Joint Compound allows the threads of screw joints to move so easily upon one another that a close, tight connection can be readily made. It is useful for steam, water, and gasoline piping. It never "sets" like red lead, but allows joints to be easily opened at any time without damage to tools or fittings.

In addition to use on threads of pipes, this compound is valuable for nuts, bolts, studs, spark plugs, radiator caps, etc. Prevents rust and resists corrosion of all kinds.

Four ounce collapsible tubes for auto use; also in one and five pound tin cans. Larger packages if desired.

WHERE TO USE DIXON'S GRAPHITE AUTOMOBILE LUBRICANTS

Transmission. Use No. 677 for all transmissions that require grease or heavy gear oil.

Use No. 675 for all transmissions that are intended for light oil lubrication. Do not fill cases above the shaft. Replenish the grease every six months. Thoroughly clean the case and renew the grease once a year.

Differential. Use No. 677 in all differentials with shaft drive, also in chain driven cars that use grease or heavy oil in the differential.

Use No. 675 in the differential of chain driven cars that are intended for light oil lubrication. Also in worm drives and the Cadillac two-speed rear axles.

Use No. 680 in leaky housings. It will not work out on the brake bands and wheels.

Do not fill cases above the axles. Replenish the grease every six months. Thoroughly clean the case and renew the grease once a year.

Timing Gears in many cars are automatically lubricated by the engine oiling system and grease cannot be used. If there is no connection with the crank case, use No. 677; otherwise use non-carbonizing oil with a little Motor Graphite added.

Universal Joints. Use No. 676. It will not melt and throw out. Cup Grease No. 5 may be used if No. 676 is not obtainable.

Replenish the grease every six months. Thoroughly clean the joints and renew the grease once a year.

Pump Cups. Use No. 676. Will not melt and run into radiator.

Overhead Valve Cups. Use No. 676. Is not affected by the heat.

Cups elsewhere than on engine. Use Cup Grease No. 5, in hot climates; Cup Grease No. 3 in moderate and cold climates.

Give one complete turn to all cups before starting on a day's run. Oil all clevis bolts, hinged joints, oil cups, etc., at least once a week.

Wheel Spindles. Use Graphitoleo, but Cup Grease No. 3 or No. 5 may be used if Graphitoleo is not obtainable.

Replenish the grease occasionally. Thoroughly clean the bearings and renew the grease once a year.

Steering Gear Housing. Fill with Graphitoleo. See instructions for wheel spindles.

Engine. Use oil recommended by manufacturer of your car.

Once in every thousand miles mix a scant teaspoonful of Motor Graphite with some oil and pour it down the breather. This will insure proper compression, eliminate

friction and prevent wear. The above applies to a splash feed system.

For a force feed system, blow small quantities of Motor Graphite through spark plug holes or put a small quantity in the palm of your hand and allow it to be sucked in through air intake of carburetor.

Clutch Thrust Collars. Use No. 676. It is not affected by the heat.

Multiple Disc Clutch. Add a teaspoonful of Motor Graphite to oil each time the clutch housing is cleaned, which should be at least once in six months.

Leather Faced Clutch. Nothing is better than Dixon's Traction Belt Dressing for keeping the leather soft and pliable and thus preventing slipping. Neatsfoot oil or castor oil is also good.

Constriction Band Clutch. Occasionally apply a few drops of a mixture of Dixon's Motor Graphite and oil.

Commutator. Use no graphite.

Magneto. Use no graphite.

Valve Seats. Motor Graphite well rubbed into the valve seats and valve stem guides, will prevent pitting and sticking.

Chains. Use Motor Chain Compound. Clean the chain thoroughly in kerosene —melt the brick of compound—immerse the chain in the compound for about twenty minutes—let chain cool.

Every pin and roller in the chain will then be coated with a graphite bushing that will not squeeze out no matter how severe the service—the chain will be well lubricated but dry and hard, and will not pick up grit.

Grease or oil do not properly lubricate a chain and have the disadvantage of collecting dirt that wears away the links.

Wheel Rims. A mixture of Motor Graphite and kerosene well rubbed into surfaces of rims will prevent rusting and sticking. Tire changes can be made quickly and easily. A thin coat of shellac and graphite also gives good results.

Tires. Motor Graphite is far better than talc for rubbing on inner tubes. It makes a better fit, reduces heating and is less injurious to rubber.

Springs. Loosen the spring clips and jack up the chassis. Then work a paste of Motor Graphite and kerosene between the leaves. The squeak will be cured, corrosion will not occur and the springs will not collect dirt as when grease or oil is used for lubricating. Thoroughly clean and renew the lubricant once a year.

Spark Plugs, Radiator Caps, etc. Use Graphite Joint Compound. It makes tight joints that open easily, and prevents rusting.

Motor Boats. Use No. 677 in the reverse gears, Cup Grease No. 676 or No. 5

in all grease cups and Motor Graphite in the cylinders. An application of Yacht Plumbago to the hull will reduce "skin friction" and increase the speed of the boat.

Motor Cycles. Pack the change-speed gears and the wheel and brake hubs with No. 677. Graphitoleo is also an excellent lubricant for the hubs. Treat chains with Motor Chain Compound. It will increase the life of chains several times. Dixon's Motor Cycle Belt Dressing will prevent flat driving belts slipping.

Thank you! If there is any information about Dixon's Graphite Automobile Lubricants that we have neglected to give you, please command it. We are at all times ready and willing to furnish information about graphite productions.

JOSEPH DIXON CRUCIBLE COMPANY

Miners, Importers and Manufacturers of Graphite

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BUFFALO, Erie Co. Savings Bank Bldg.
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Spl. 464-1-15

A WORD OF WARNING

Not all graphite should be used for lubricating purposes.

Lack of this knowledge has cost some people a great deal of money for repairs.

Graphite greases made of common, cheap graphite are positively injurious to all bearings and especially so to delicate bearings. The selected Flake Graphite used in the various Dixon Graphite Lubricants is the only kind of graphite that will not cut or pack or ball up in bearings.

Beware of the man who tries to sell you lubricants that "contain Dixon's Graphite" or that are "as good as Dixon's."

There is no such thing as good, cheap graphite lubricants.