

FOR AUTO ELECTRICAL REPAIRS See F. HALL

The Auto Electrician—20 years' experience Storage Batteries recharged and repaired. All work guaranteed. 335 King Street - - - Telephone 939

WE ARE NOW BOOKING ORDERS FOR WINTER Automobile Painting SELECT FINISHING FROST'S AUTOMOBILE PAINTING 299-305 QUEEN STREET.

For Auto Repairs For all kinds of Automobile repair work, and where a real mechanic is needed, see us and have it done right. R. GREENLEES Angrove's Auto Sales, 146 Sydenham Street Phone 1282.

Kingston Battery Service W. MILNE, PROPRIETOR.

ALL MAKES OF STORAGE BATTERIES, STARTING MOTORS, GENERATORS AND MAGNETOS REPAIRED OUR PRICE FOR CHARGING BATTERIES 75c. PHONE 1925J. 113 BROCK ST.

WE SERVE GOOD MEALS

Good meals served to your liking. EVENING PARTIES given first class attention.

THE VICTORIA CAFE

384 King Street. Sing Lee and Gan Lee, Props. Telephone 762.



Convenience If you can't sleep turn on the light. And make the brightest day of night. An adjustable lamp that can be used on the table or attached to the wall or bed is a great night time convenience that costs very little money. Whatever fixtures you need can be supplied by us—we want you to allow us to show you around the place.

BURKE ELECTRIC CO. ELECTRICAL SUPPLIES & SERVICE PHONE-423. 74 PRINCESS ST.

Sometimes a man gets his wife's coat. Sometimes he can't get his wife's goat because he is it. Imagine being chased about the yard by a goat full of dynamite.

Dry Mixed Slab Wood Best quality Summer fuel. Also Dry Body Hard Maple; cut to suit your stove. Prompt attention given to all orders.

Chas. Bedore & Son 274 NELSON STREET Phone 1746J.

GET IT REPAIRED

Sewing Machines, Phonographs, Guns, Rifles repaired and refitted. Parts supplied. Saws filed, knives, scissors and edge tools ground. Locks repaired. Keys fitted to all kinds of locks. All makes of Lawn Mowers sharpened and repaired. We can repair anything that is repairable.

J. M. PATRICK 149 Sydenham Street, Kingston Phone 3066J.

A page digested is better than a book hurriedly read. Words only live when worthy to be said.

Special Prices on Davenport, Chesterfields and Couches



KROEHLER DAVEN-O Davenport Beds ... \$37.00, \$45.00 and up Chesterfield Suites—5 pieces—Lamp, Table, 2 chairs and Chesterfield. Worth \$250.00, for \$200.00 Extension Couches \$10.50, \$12.50, \$13.50. Large size. The largest and best line of Furniture in the city to choose from.

Robt. J. Reid

Director of Funeral Services Ambulance Phone 577.

HINTS FOR THE MOTORIST BY ALBERT L. CLOUGH

Charging The Battery By Idling The Engine

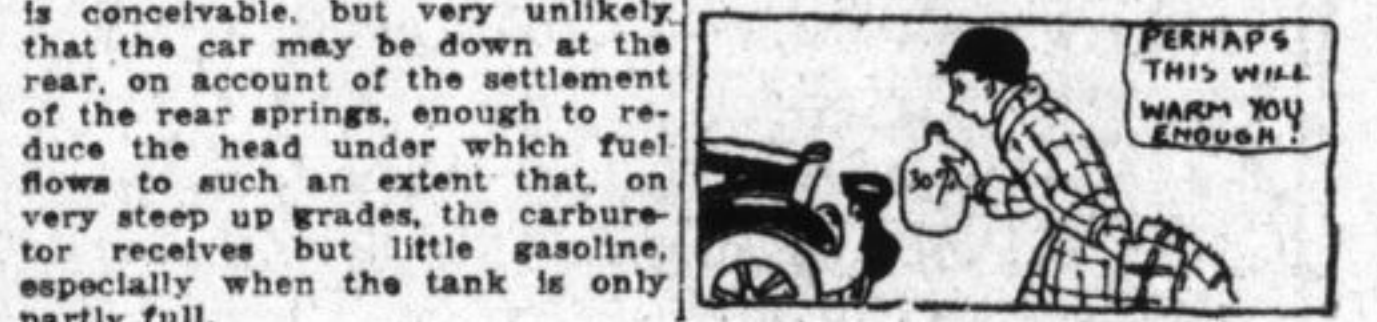
Although Not A Recommended Procedure, It May Have To Be Resorted To IF A BATTERY GIVES SIGNS of approaching exhaustion, the best procedure is to take it to a service station to have it recharged, substituting for it one of the station's rental batteries, until it is ready for replacement. Of course, if one has a rectifier, charging a battery in the home garage, solves the problem in a convenient manner. But not very many motorists own rectifiers and some are not within easy reach of charging stations and, in such cases, charging by idling operation of the engine is the most practicable method. It should be done sometimes when the engine is fully warmed in service. The cells should be supplied with distilled water, if necessary, the engine started and speeded up, by opening the hand throttle, to the point at which the ammeter shows a substantial charging current. Five or six hundred revolutions per minute of the engine may be required to cut the generator into circuit and the charging rate, in the case of the average modern car, will increase somewhat up to about twice this engine speed, but it may not be wise to run the engine fast enough to secure the maximum generator current, on account of vibration and noise, which always suggest that considerable wear and tear is taking place. A moderate speed and a longer period of running, even at a reduced rate of charge, will usually be found advisable. The effect of even one hour's charging is noticeable upon the condition of a battery, that is not too far gone, although two or three hours of running will often be found necessary, if the car is in a garage when this operation is performed the doors should be left open and one should avoid prolonged breathing of the exhaust gases. If the throttle is properly set and the engine all right, there is no occasion for anyone remaining in the garage all the time.

FUEL SUPPLY INADEQUATE ON GRADES IS 30% ALCOHOL SUFFICIENT?

F. H. L. asks: If I keep 30% of alcohol in the cooling system of my car all winter, can I dispense with robes, etc., over the radiator except, of course, in extreme cold weather? Answer: We think you can, so far as any danger of the radiator or other parts being damaged, by bursting, is concerned, as you would seldom leave your car long exposed to temperatures below zero. There would probably be some formation of loose ice in the solution at temperatures considerably above zero, however. Nevertheless, for reasons other than protection of the system from damage, our feeling is that radiator, that some form of engine shield cannot properly be dispensed with in winter nor indeed in any but the warmest portion of the year. Starting is so much easier, gasoline economy is much higher, and oil dilution so much less, when engine temperature is kept as high as practicable, by shielding the radiator, that some form of engine heat conserving provision is of great advantage. You realize, of course, that covering the radiator and hood has no permanent effect in protecting from freezing, but only defers the time at which the water reaches the outside air temperature.

C. D. F. asks: Can you explain why the engine of my 1911 car begins to spit and cough after going a block or two up a very trouble on level road or slight steep grade, while it has no such trouble on the level or when the carburetor and fuel line have been inspected and found apparently all right. Answer: We believe this car has gravity fuel feed from a tank under the front seat. It is just possible that the air-vent hole in the filler cap has become nearly plugged up, so that not enough air can enter to replace the large amount of gasoline consumed in overcoming severe grades. You better see that the air-vent is free. Can it be possible that the carburetor float does not work freely, to renew the supply in the fuel bowl, when the car is inclined at quite an angle? It is conceivable, but very unlikely that the car may be down at the rear, on account of the settlement of the rear springs, enough to reduce the head under which fuel flows to such an extent that, on very steep up grades, the carburetor receives but little gasoline, especially when the tank is only partly full.

Brown And The "Black Plague" Carbonization Is An Evil That Is Somewhat Controllable AS HIS CAR CLANKED ITS WAY into the service station on high gear, (he never changed until the stalling point was reached), and the engine gave a few convulsive and odorous kicks after the ignition was off, Brown caustically remarked: "This blooming coke oven you sold me for an engine is all plugged up again with carbon, and is knocking its head off, like it has done every thousand miles since you stung me with it. Suppose you'll have to give it another scraping, although I think it like today." "We'll do the scraping job if you say so, Mr. Brown," said Ed, the repair foreman, "but if you need it bad, let us give it the oxygen and you can have it in an hour," to which suggestion Brown gladly agreed. "Of course we like your carbon cleaning work," continued the foreman, "but we don't want to take your money for unnecessary jobs. These engines don't generally carbonize like this one and there must be something wrong with yours. Let's take a peek. She sounds and smells awful rich. Yes, I thought we could cut her gas down a lot and still have her run right. Try that adjustment and see if she isn't snappier than before. It's a safe guess she'll keep clean longer now. Oh, spark intensifiers! Plugs been getting oily? She's about due for a new set of rings. Bring her in sometime and we'll stop that pumping. What, taking all cold air this weather? You want all the heat you can get to vaporize this bum gas and keep it from baking onto the piston heads. What kind of oil are you using, Slipperinet? That's a new one to me. Why don't you switch to one of the standard brands and see if it doesn't carbonize less? No hood-cover! The water must be running pretty cold and this makes a wet mixture in the cylinders, that cooks onto the pistons and valve heads. Let us put a shutter-front on your radiator. You'll like it." Brown stood for this oration all right and soon drove his car away, with the carbon burned out, making an appointment for the shutter-front and piston-ring work on the next Tuesday. After that it was a long time before he showed up again and when he did Ed, who had read Brown's odometer while working on the car, noted that 5000 miles had been reeled off in the interval. "How's the carbon, Mr. Brown," was Ed's greeting. "Not bad," said Brown, "but you better sweeten her up a little with the oxygen."



ANOTHER CASE OF SHIMMING GENERATOR COMMUTATOR GIVES TROUBLE

W. F. P. writes: My car troubles me by shimmying. I took out the play at the wheels and tightened the king-bolts, which stopped the shimmy temporarily, but it started in again. What is the remedy? Answer: Check up the following points: That the wheels have the normal camber. That they are parallel, when pointed straight ahead or that they do not toe out, in any event. That the front spring connections to the axle are correct and tight. That the steering-arms are secure in their tapers in the knuckles. That there is no lost motion at the end connections of the tie-rod. That the steering connection-rod is properly tight at the pitman end and at the right knuckle connection, and that the steering column is secure on the side frame member. When a car begins to shimmy, after a long period of satisfactory operation, it is generally because of lost motion somewhere in the steering-gear or because something has worn or become bent, so as to throw the wheels out of correct relationship or inclination.

Questions of general interest to the motorist will be answered by Mr. Clough in this column, space permitting. If an immediate answer is desired, enclose self-addressed, stamped envelope.

FEW DON'T FOR RADIO FANS

Don't handle the vacuum tubes roughly or slam them. Don't burn vacuum tube filaments above rated amperage and voltage. Don't rely solely on an ammeter for proper current or consumption—filaments should be burned at constant voltage rather than at constant amperage. Don't make the drastic error of connecting the plate batteries with the filament terminals—watch all battery connections. Don't use more than one standard block plate battery (2.5 volts) on the plate of Radiotron detector tube UV-200. Don't use more than from 60 to

80 volts on the plates of Radiotron amplifier tubes UV-201—60 volts will be found quite sufficient. Don't burn out a vacuum tube through carelessness and expect your dealer to exchange it for another. Don't use excessive plate voltage on power tubes if you want long life. Don't energize the filaments of all the tubes in a cascade circuit at once, unless the circuit has been used before. Don't take one tube out of a cascade circuit in which the filaments are in parallel—it causes a rise in current in the remaining filaments and may burn them out. Cut off all power first. Don't try to use Radio Corporation radio frequency intervalve transformers with other tubes than Radiotrons—you may not be able to make them function properly. Don't expect your loud speaker to work properly if you have a set of phones connected to your detector circuit. Don't be anxious to produce sound with very great volume—it isn't necessary. Don't expect to get the best results if you use an amplifier tube for a detector, or vice versa. Don't forget that vacuum tubes cost from twenty to thirty times as much as ordinary incandescent lamps—they deserve a little respect. Don't expect to have a loud speaker operate for a detector tube—you'll be disappointed. At least one stage of radio-frequency amplification is generally necessary.

MOTOR NOTES OF INTEREST.

Ethyl gas, a new automobile fuel, now sold on the market, has a characteristic light wine color, which distinguishes it from ordinary gasoline.

Throughout Colorado 247 automobile camps accommodate 643,015 motorists during 1932, as compared with 213 camps with 514,412 tourists in 1932.

A barber shop on wheels is the latest venture in Los Angeles, Cal. The barber in a motorcycle side car calls for the business man at his suburban home, and gives him a shave while enroute to his office.

Automobiles are not permitted on the island of Bermuda. The reason given is that the inhabitants feel that horse drawn vehicles are fast enough, and that the beauties of their island might be too rapidly exhausted if tourists used cars.

Automobile accidents in Chicago last year, of which there were 31,604, resulted in a loss of \$13,509,078. This year's total will be greatly in excess of that number.

Flint, Mich., has 54 plants manufacturing complete automobiles and trucks. There are twice this number of subsidiary companies furnishing parts for the complete production. Figures show that there are employed in these plants, producing automobiles and trucks, 183,210 people.



One Gallon

of "Maple Leaf" denatured Alcohol and one gallon of water makes two gallons of Non-freezing mixture that WILL NOT FREEZE at 30° below Zero, and the cost is considerably less than the Car-wrecking Calcium Chloride, Alkaline; Saline or other prepared Anti-Freeze solutions of unknown, probably dangerous, ingredients.

Correct Winter driving preparations when "Maple Leaf" denatured Alcohol is used, are as follows:

- Empty and flush the radiator and cooling system and see that there are no leaks. Tighten or renew the hose connections. Tighten the gaskets. Put fan and belt in good order and renew belt if necessary. Do not run car with radiator cover or cardboard in front. Allow a free flow of air to the fan at all times. Then with Maple Leaf Brand denatured Alcohol in your radiator—your car is completely protected.



FLAT RATE SERVICE

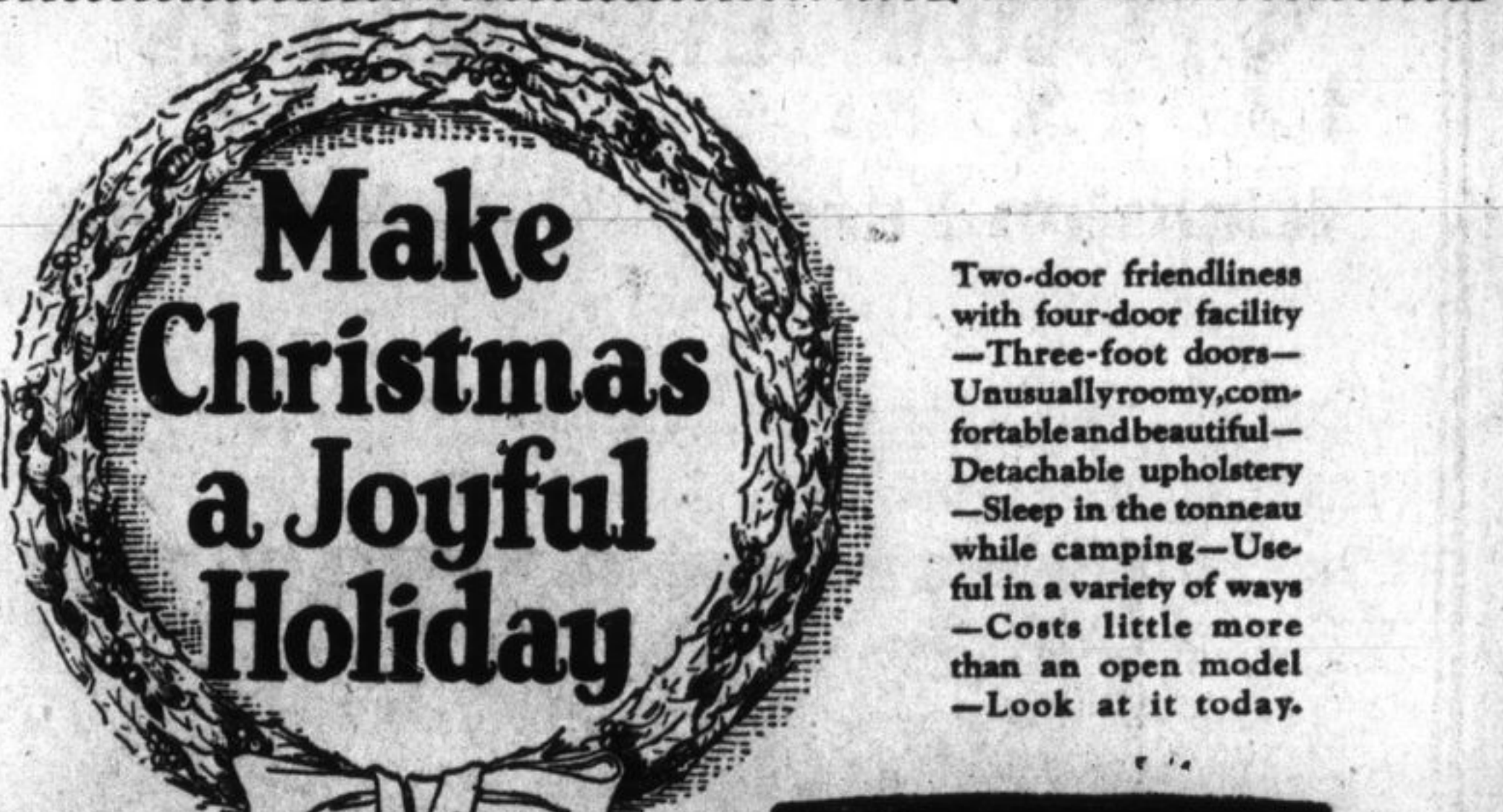
Bring your car in, or send for us to call and get it. We will give you a flat rate for overhauling it or repairing it. First class mechanics. Special Compressed Air Oil Spray or for removing squeaks, and the Greasing Rack, are some of the features. Service day or night (repairing and washing).

BLUE GARAGES, Limited Phone 567. Cor. Bagot and Queen Sts.

Monarch Storage Batteries

Manufactured in Kingston by Kingston labor. With Kingston Capital and Kingston Brains. IS KINGSTON EFFICIENT? Show your faith in local industries and utilize home-made products.

The Monarch Battery Co. Limited 275 ONTARIO STREET, KINGSTON, ONT. PHONES 886-887.



Make Christmas a Joyful Holiday Buy The Good MAXWELL CLUB SEDAN

Christmas is approaching. Make this great holiday the most joyous you have ever had. You can do this by buying a good Maxwell Club Sedan—an ideal present for anyone. And it's a sound and sensible investment, too. Price \$1675, delivered. CLARK BROS. Maxwell-Chalmers Dealers. Corner Princess and King Streets, Kingston. Phone 2897.

Two-door friendliness with four-door facility—Three-foot doors—Unusually roomy, comfortable and beautiful—Detachable upholstery—Sleep in the tonneau while camping—Useful in a variety of ways—Costs little more than an open model—Look at it today.