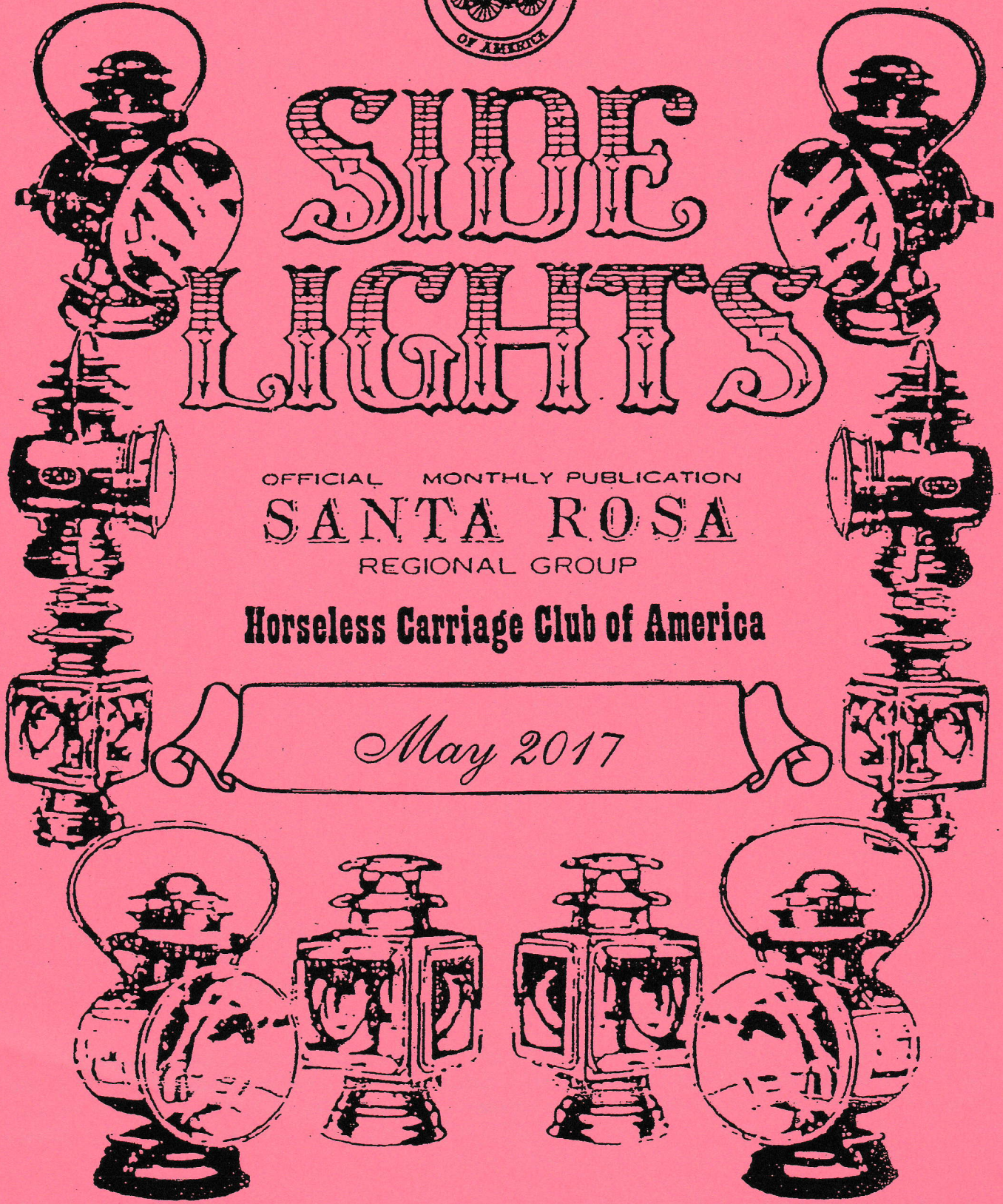


# SIDE LIGHTS

OFFICIAL MONTHLY PUBLICATION  
**SANTA ROSA**  
REGIONAL GROUP

**Horseless Carriage Club of America**

*May 2017*



**The Santa Rosa Regional Group  
Of the  
Horseless Carriage Club Of America  
P. O. Box 3993, Santa Rosa, CA 95402**

*Dedicated to stimulating interest in antique automobiles and promoting interclub good will*

**OFFICERS, DIRECTORS & NON-BOARD POSITIONS FOR 2017**

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<b>Vice President</b>	Wayne Simoni 789 Furlong Rd. Sebastopol Ca. 95472	823-1637
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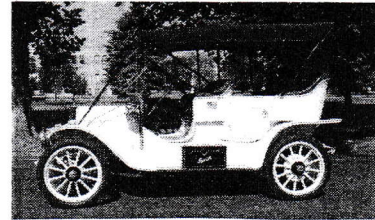
A non-profit organization, The Santa Rosa Regional Horseless Carriage Club was chartered on September 23, 1955. Monthly meetings are currently held at members' homes or at a local restaurant on the 3<sup>rd</sup> Thursday of each month at 7 p.m. unless otherwise notified. Members are notified of the meeting dates and events by the **SIDE LIGHTS**, the Club's monthly newsletter. Guests are welcome at all meetings.

**THE SIDE LIGHTS** was first published in July 1959 to inform members of meetings and current events. It is mutually exchanged with other **HCCA Regional Groups** and is circulated to **paid members, National HCCA Directors, HCCA Gazette Editor** and **paid advertisers**. Opinions expressed by **THE SIDE LIGHTS** contributors are not necessarily those of **The Club**. Materials to appear in **THE SIDE LIGHTS** must reach the **Editor** by the third of each month as much as possible in order to be publicized in a timely manner.

- NOTES:** (1) **National HCCA membership is a mandatory pre-requisite to any Regional HCCA Group membership. However it is not necessary to own a pre-16 vehicle.**  
 (2) **Other HCCA clubs may reprint any material contained herein for their use.**

# PRESIDENT'S MESSAGE

MAY 2017



*As a reminder, we have gone back to having our general meeting on the Third Thursday of the month; still at 7pm at the Round Table Pizza, Guerneville Road at Marlow Road, any changes will be noted in our Side Lights newsletter.*

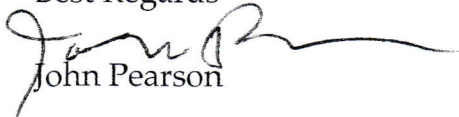
The Fisherman's Tour to Bodega Bay on Sun. April 9th turned out to be a sunny day and another great tour to the coast and the Fishermans Festival (weather was a good change from the Saturday rains). After Bodega Bay, we did our usual stop in Occidental for refreshments and to say goodbyes. Bill seems to be enjoying driving my old 14 buick and the brakes are no longer squeaking after he replaced the linings.

Gail will be hosting the May tour, meeting at Fulton & Guerneville Roads @9:30. More details about the tour at May 18th General meeting at Round Table Pizza.

We are still thinking of doing an overnight tour heading north to Willits and Fort Bragg; no date has yet been set. We need to see how many members would like to go on this tour and we should set a date at our next meeting.

*Lets make this a great touring year!*

Best Regards

  
John Pearson



## WANTED

- **Door jambs for '27 - '28 Chevrolet roadster/ touring**  
**Art Sell**, phone (360) 241-0903
- **1910-1913 Transmissions:** Brown-Lipe 3-speed, Warner 3-speed, Timken 3-speed and shifter  
**Rocky Younger**, (503) 656-4378

## FOR SALE

- **1986 GMC Caballero** (like El Camino) loaded and restored - \$7500  
**Mark Shaw**, durcodude@comcast.net
- **1930 Lincoln 176-B Dual Cowl Phaeton**  
Top cover, side curtains, trunk with rack.  
Very Nice! \$75,000  
**Frank Hurley**, (360) 256-9855 or (360) 921-1450
- **1931 LaSalle R.S. Convertible Coupe**  
Original & complete, nice daily driver. \$60,000  
**Frank Hurley**, (360) 256-9855 or (360) 921-1450
- **1953 Jaguar XK120 Coupe Project** \$40,000  
**Dennis Peterson** (503) 650-4356
- **1926 Dodge, 4-Door Sedan** - Fully Restored, beautiful mohair upholstery and interior, less expensive than a Model T Ford, but twice as comfortable. \$14,500.  
**Jim Zordich**, (503) 603-0115
- **1928 Ford Roadster** - High-point Canadian car.  
**Jim Schoffstall**, (503) 680-3412

# 2017 SANTA ROSA H.C.C.A. ACTIVITY CALENDAR:

DATE:	EVENT:	COMMENTS:
2017	NOTE: ALL MEETINGS WILL BE AT ROUND TABLE PIZZA, EAT 6:30 TO 7 - MEETING AT 7:00+/- (OR AS NOTED)	GUERNEVILLE ROAD @ 1791 MARLOW ROAD, SANTA ROSA. (SAFEWAY CENTER)
MAY	DO OVERNIGHT TOUR TO WILLITS & FORT BRAGG??	
MAY 14	MOTHERS DAY	
MAY 18	MEETING AT ROUND TABLE	
MAY 21	GAIL SHAW TOUR	MORE TO COME
MAY 21-25	BBC SWAP & TOUR IN PA.	
MAY 29	MEMORIAL DAY	
JUNE 15	MEETING AT ROUND TABLE	
JUNE 17 OR 18	SIMONI TOUR	MORE TO COME
JUNE 25-30	N.E. BRASS & GAS TOUR IN MAINE	
JULY 20	MEETING AT ROUND TABLE	
JULY 23	TOUR	MORE TO COME
JULY 27-30	RYAN RAMBLE TOUR. BASED IN PETALUMA	WE MAY WANT TO JOIN IN ON THIS TOUR ONE DAY OR ALL THREE (INSTEAD OF OUR 7/23 TOUR?)
AUG 17	MEETING AT ROUND TABLE	
AUGUST 20	EGGLESTON TOUR	MORE TO COME
SEPT. 4	LABOR DAY	
SEPT 11-14	TWAIN HART TOUR	BY BAY AREA REGION
SEPT 21	MEETING AT ROUND TABLE	
SEPT. 24	SMITH TOUR	MORE TO COME
OCT 4-7	HERSHEY SWAP MEET	
OCT 19	MEETING AT ROUND TABLE	
OCT 22	POSSIBLE SKUNK TRAIN RIDE	OVERNIGHT ON COAST
NOV. 16	MEETING AT ROUND TABLE	
DEC.	NO MEETING	
JAN	INSTALLATION DINNER	TIME:
NOTES:	PLEASE ADD CORRECTIONS & OTHER CAR ACTIVITIES & DATES AND GIVE TO PEARSON	PLEASE SIGN UP FOR OPEN DATES DATE: 5/1/17

## Meeting Minutes

The April 20<sup>th</sup> meeting of the SRHCC was held at Round Table Pizza on Marlow Road in Santa Rosa, CA and was called to order at 7:00pm by President John Pearson.

**Attendees:** We had 13 attendees this month: Linda and John Pearson, Linda and Daryl Eggleston, Vicky Porter, Bill Scales and Cinda Craven, Jay Whited, Stan Romando, Donna Jones, Gail Shaw, and Kim and Wayne Simoni. No guests or new members were present.

**Secretary's report:** Minutes from last month's Sidelights were approved as published.

**Treasurer's report:** Linda Eggleston reported Jay Whited had been paid \$42.97 for two months of Sidelight expenses. Stan Romando paid Jim Flint's yearly dues after carrying the money in his pocket for three months! We do not have tax-exempt status and cannot piggyback on the national HCCA status for several reasons. Therefore, we are staying with Exchange Bank. Gail Shaw and Donna Jones have been added to the account, along with current signees John Pearson and Linda Eggleston. Checks can now be written from the account.

**Correspondence/Editor:** Jay received no correspondence from other clubs this month.

**Old Business:** Discussed fund raising yard sale. June has been proposed and John Pearson is coordinating a date and location.

**New Business:** None.

**Tours:** John and Linda led a great tour out to the Fisherman's Festival in Bodega Bay in April. Sunday, May 21<sup>st</sup> tour will be led by Gail Shaw. June 18<sup>th</sup> tour will be led by Wayne and Kim. Several members are interested in the July 24<sup>th</sup> thru 30<sup>th</sup> Ryan Ramble. It is being held in Petaluma this year. John is going to see if those who do not sign up for the entire event (\$150 registration fee) can tag along/pay for one day's worth of touring. This will be in place of a July overnighter.

**Sunshine:** Linda Pearson had heard of no issues with our members. We are all well!

**Membership:** No report.

**Website:** No report.

**Car Talk:** Kim and Wayne told us about their trip to Cape town, South Africa. Stan had an interesting dealing with a Hartford, Connecticut car collector.

Meeting was adjourned at 7:35pm.

Respectfully submitted,  
Cinda Craven, Secretary

# Tankless Task

By Pete Kneeder - Thanks, The Brass Nuts

---

Of the various cars I have restored or partially restored, I have usually found it necessary to clean out the gas tank. Dirty tanks can lead to all kinds of problems, not the least of which are continued rust, leaks, clogging of the lines and the vacuum tank and messing up the carburetor. After a lot of trial and error over the years (mostly error), I think I have finally found a way to clean up an old gas tank that works. I really got motivated last week when I took my 1928 Buick gas tank to a radiator shop and they wanted \$128 dollars just to clean out the tank. So...I took it home and did it myself!

So, here is one way of doing it. I am sure there are other methods, as well. Do all of this work outside, preferably when its windy and warm and be sure to have any soldering or welding done beforehand, if possible.

Step 1: Seal your tank as well as possible and pour in a gallon of acrylic lacquer thinner. Rock it back and forth and keep it in at least overnight. This will help remove grease, oil, old paint, but not rust. (That's Step 2). I jury-rigged a "Rube Goldberg" device that rocked the tank back and forth. I used a gear motor and a lever in the filler tube, keeping the tank in motion in all these steps helps. Empty the tank and let it dry out.

Step 2: Purchase a gallon of muriatic acid (available at most hardware stores), or look in the swimming pool supply section. **WARNING:** This is powerful stuff! One good whiff will make you gasp! Do not dilute it. Seal the tank again and pour it in. This solution will eat the rust out, lift up the grime and for a few minutes, make the tank inside as clean as a baby's buns. Muriatic acid is paradoxical; it will clean out rust, but also makes things rust over time! Leave it in for at least an hour and work in a high wind or use a fan to keep the fumes away. Dump it out into a safe container. (It is reusable if your tank wasn't too much of a mess.) Immediately proceed to Step 3.

Step 3: Fill the tank half-way with water (preferably warm, but not required) and put in a cup or two of Cascade automatic dishwashing soap, (a powerful detergent.) Slosh it around for a half hour or more. Dump it out.

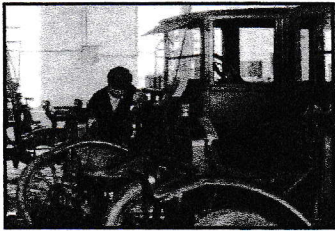
Step 4: Dump in two gallons of Metal Etch for a large tank. A small tank of 12 gallons or less would probably require one gallon of Etch. Metal Etch is God's gift to the car restorer. I use it on all metal parts. They will never rust again if properly treated with Metal Etch. Metal Etch is made by Jasco, costs about \$9 a gallon. Slosh the Metal Etch around inside the tank.

Step 5: Rinse very lightly with water. Try to leave some Metal Etch in and let the tank dry thoroughly. Let it stand at least a week. Sometimes I run a hose into it from the exhaust side of a shop vacuum to speed up the drying process. When completely dry, go to Step 6. This is the last chance for soldering or doing any repair requiring heat.

Step 6: Dump in a can of tank sealant. Be sure the sealant is alcohol and octane booster resistant. I have found that one can will service several tanks, so after you pour it in, shake it around and pour it out and save the remainder for another tankless task tank.

Step 7: Set the tank aside and let it dry thoroughly for a week or two (especially if it uses a cork float. If the tank isn't dry, cork will get glued to the bottom.)

You're done! Pour yourself a big one and admire your gorgeous, (clean on the inside) tank.



## Under the Hood

# Motor Car Carburetion in Cold Weather

By B. M. Ikert

*Motor Age Editorial Staff*

**L**OW temperatures and carburetion mix about as well as water and oil. This not only applies to starting the engine but after it gets to running. You may think your engine is performing up to snuff after you get going, but if you drained your crankcase and observed how much raw gasoline was getting past the rings and cutting your oil, your tune would change.

The fuel we get to-day is of low gravity and not only difficult to vaporize but lots of it is not consumed at all, and with a rich mixture the liquid fuel remains in the cylinders, cuts the oil on the cylinder walls, and finally the gasoline-oil combination works its way into the crankcase. That is the reason engine manufacturers insist that you drain your crankcase much more frequently than you did a few years ago. Do not fool yourself when you state that your car has traveled so many hundred miles without oil and get the idea that your engine is very economical in the use of oil. Your gage may show the right amount, but rest assured a great deal of this is nothing more than the heavier ends of the fuel your engine could not burn.

### Try This

Try this experiment some time, especially if your engine has been misbehaving. Drain the contents of the crankcase and pour all of it into a long glass tube or bottle. Let it settle for a time, and study the results. The chances are you will get a thin fluid that lacks body. You can tell this by the

way it flows and the way it feels when rubbed between the thumb and forefinger. If you keep on trying to lubricate your engine on this thin stuff, something is going to suffer, and before very long your cylinder walls wear and the bearings need replacing. Then you blame the engine maker for poor materials.

This leads us to some of the so-called mysterious cases of engine trouble, which, after all, easily are explained by these conditions. Excessive gasoline consumption, hard starting, early piston and bearing wear, knocks, smoking due to raising the oil level owing to raw gasoline getting into the case, heavy carbon deposits, overheating due to inferior lubrication, lack of compression, etc., all can be traced to one source—fuel. But here we have to take the oil man's side and not scare you into laying up your car with the idea that the gasoline will gradually get up to where it was some years ago. It probably will not. Also the present fuel has plenty of pep in it if you know how to get it out. The answer is heat.

Do everything you can to keep the carbureter, intake manifold and engine jackets as warm as possible. The heat should be applied and kept up to the passages into the cylinders, thus affording the least possible chance for condensation. It is per-

fectly all right to heat the bowl of your carbureter to get initial heating of the fuel, but what good does it do if the gases have to pass through all sorts of gooseneck bends, etc., before getting to the block? They will only condense and you get raw fuel in the pockets and it is drawn into the combustion chambers. Heating the fuel pipe, water-jacketing the carbureter, heating the float chamber, and intake manifold and similar arrangements are valuable aids, but the heating process should be carried as far as possible.

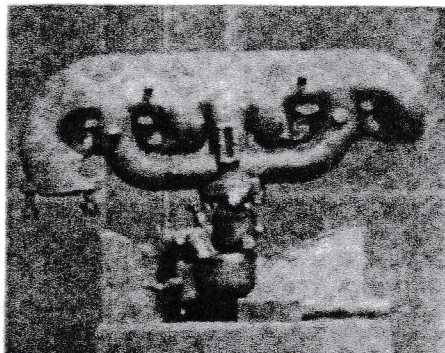
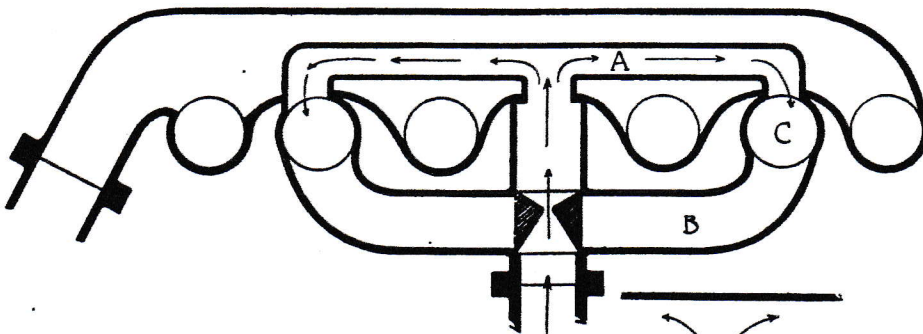
We still see cars operated with a long intake manifold, and about the best advice to such owners is to cut the manifold off and weld the lower end to the branch or elbow left on the block, thus hanging the carbureter somewhere in the vicinity of the cylinders, as in modern installations. It is worth while even if you have to fit a vacuum tank to feed the gasoline. Modern carbureter installations are so arranged that the engine can be started by the normal use of the starting motor, provided the air supply of the carbureter temporarily is cut off by the choker. Starting an engine in a heated garage is not much more difficult in winter than in summer. The greatest waste of fuel and difficulty in getting started is where the car is housed in an unheated garage.

### Starting Cold Engine Hard

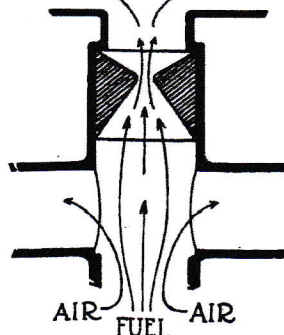
Starting a cold engine at low temperatures presents many difficulties. In the first place the battery efficiency is cut down and the starter has not the same energy as in summer. It may slowly turn the engine over, and slow grinding like this seldom is productive of starting. The oil is more or less solidified and offers much greater resistance than if the engine were warm. In getting such an engine started it helps greatly to pour warm water into the cooling system. This thins the oil and the engine turns over much more readily.

In a previous article it was pointed out that nothing was gained by holding the starter pedal down in an attempt to start a cold engine. By cold engine we mean one that is housed in an unheated place. The battery is drained considerably and gasoline wasted. A far better plan is to introduce some of the gasoline in the cylinders through the priming cups. But priming should be carefully done. Do not open the cups and squirt half an oil can of raw gasoline into the combustion chambers. Simply fill the cups full, then open the handle and let the cupful run into the engine. To carry the idea a point further get some high-test gasoline from a drugstore and use it. A bottle of this will last for a long time.

The real job we have in winter, however, is to make use of all the fuel we put in our tanks. We, no doubt, waste some in filling, some more when we pull out the



Exterior view of Universal manifold designed for tractor service



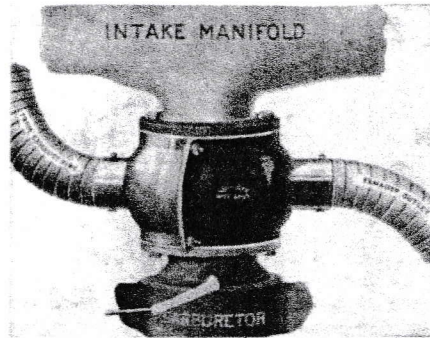
Sectional view of the Universal manifold, showing cone in position at low speeds and also when throttle is opened. Arrows show course of heated fuel

choker and run for a while with it in this position. Then the majority of us run on too rich a mixture. We have to do this to get all we can out of the fuel. We must get as much of the lighter ends of the fuel as possible, and the way it is done is usually by turning the needle valve open. Then we get the conditions outlined in the first chapters, too much unburned fuel and crankcase distillation.

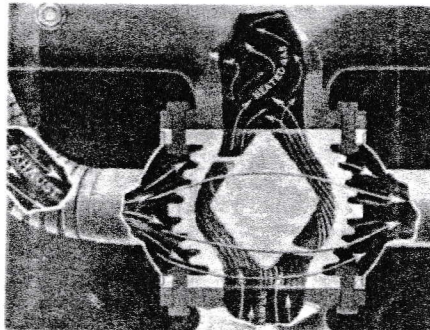
To give an illustration of what is possible in the way of utilizing practically all, if indeed not all, of the fuel take the following test of the Universal manifold made by Fish & Perry, Chicago, by a MOTOR AGE representative. Briefly, a Ford car, with four persons was driven first with a stock carbureter and the Universal manifold with a gallon of accurately measured fuel and then with the regular manifold under the same conditions, only in this case the car was traveling in the reverse direction over the same course as the first test. At exactly 31.2 miles the test tank fastened to the dash ran dry on the first test, as against 23.7 miles on the regular installation, which as many will admit is not bad mileage either. But the question is what became of the fuel in the second test that in the first carried the car 7.5 miles farther? The carbureter setting was not disturbed in the second test from that of the first, but there was noticeable spitting back due to too lean a mixture. Ordinarily a man would have given his needle valve a slight turn for more gas, for the car did not handle well under the lean setting. But if this setting was all right with the heated manifold test, it stands to reason that such a job runs more economically, for acceleration, etc., were perfect.

**Universal Manifold Novel**

The Universal manifold has a rather novel construction. A sectional view is shown herewith. The object is to treat the fuel without heating the engine. At slow speeds or when the engine first is started air and fuel are drawn through the small cone to the engine through the small pipe surrounded by the exhaust manifold. Normally the cone is at the bottom of its travel and all the gas passes through the small hole in the cone. As the throttle is opened the suction lifts the cone and immediately the side branches of the manifold are opened. The fuel, being heavier than the



*Lo-See hot-spot as installed above carburetor and below manifold*



*Sectional view of Lo-See hot-spot, showing spiral fluting of gas passage*

air, continues to pass through the hole, but the air turns to the right and left and then reunites with the fuel at the cylinder ports. A recording pyrometer shows the temperature at A about 400 to 500 deg., depending on engine speed, while at B the temperature was atmospheric. At C, the vital point, the temperature was 160 deg. and remained at this figure almost constantly. By changing the size of the hole in the cone the temperature can be varied.

Another device with which we have conducted some interesting experiments is the Lo-See hot-spot, made by the Wee Specialty Co., Chicago. In this device heat is applied directly from the exhaust manifold to the aluminum jacket surrounding the hot-spot, which itself is an aluminum casting. Installation is made without altering the carbureter, engine design or manifold.

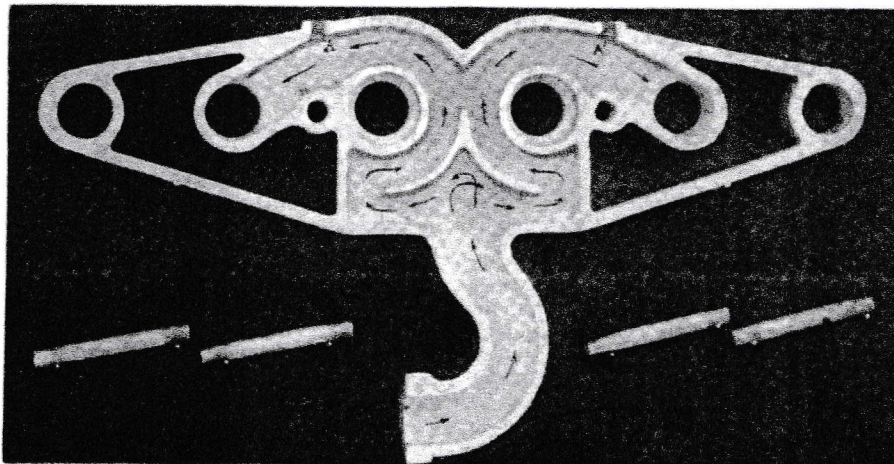
The interior of the casting is fluted spirally, or rifled in a sense, which acts as a separator for throwing the raw particles of fuel against the metallic surfaces, which are maintained at a proper temperature from the exhaust gases. Offhand the reader might say that the intake gases are restricted, but such is not the case, as the device is made with ports whose total area of opening is larger than if the same diameter as the carbureter opening were kept all the way through.

The Lo-See was tested by a MOTOR AGE representative on a car equipped with a sixteen-valve engine. It was interposed between a top outlet carbureter and manifold. One of the characteristics of this particular manifold was that it loaded, especially at low and at moderate speeds. After the Lo-See was installed this loading, or feeding of raw fuel, was entirely overcome and the acceleration was notably smooth. Again the spark plugs on this job frequently fouled, in spite of tight rings, proper oil supply, etc. Examination of the plugs after a very long run with the Lo-See showed them dry and clean, which would seem to indicate that the fuel was completely burned up. These results may vary some with different installations, but if the hot-spot is installed as close to the block as possible, such performance should be duplicated. The adjustment on the carbureter previously had been cut down to as lean a mixture as possible, but after the engine got to running several minutes with the Lo-See the needle valve was closed a quarter turn, showing that the heavy particles of fuel formerly entering the cylinders in a raw state were being broken up and consumed. On this particular car a gain of a little more than 4 miles to the gallon was obtained. In addition to this some tests were made with glass manifolds, showing that with the present low grade of fuel a steady stream of liquid fuel enters the cylinders, which, however, was not apparent when the Lo-See hot-spot was used except for a very brief period when starting with a cold engine.

**Get Heat to Mixture**

What is true of the Universal manifold and Lo-See hot-spot is probably true of other such devices to a greater or less extent; but our observations were centered on these, inasmuch as they are comparatively new products. At any rate, the motorist, especially if he drives an old model, should look into the question of getting heat to his mixture. It is possible to rig up some sort of device like a stove around the intake manifold, wrapping the manifold with felt, etc., but the manufacturers of hot-spots and manifolds have worked out the problem from a scientific angle, and it really pays in the long run to use these.

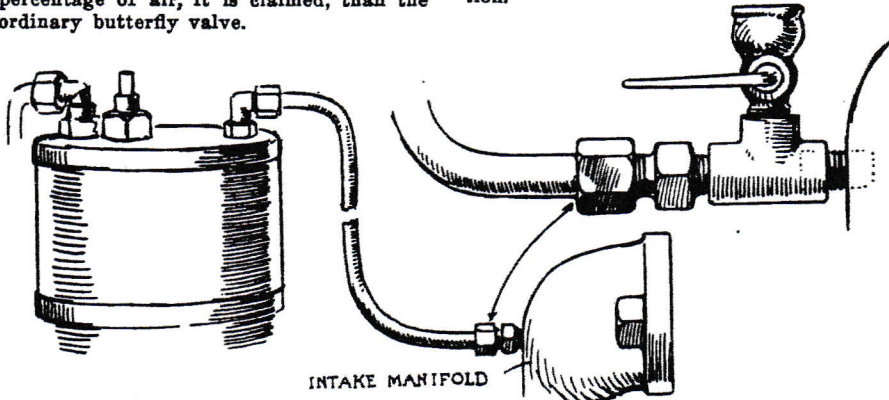
Another newcomer in the heated manifold line is the Gallion vaporizer for Fords. This is made by the Gallion Iron Works & Mfg. Co., Gallion, Ohio. In this air and gas enter the manifold and are drawn upward, as shown by the arrows, into a pocket, then out from both ends of the pocket and around the two hot exhaust ports in the center of the manifold and finally into the intake ports of the block. The same idea is back of this design, namely, that of vaporizing the fuel so that no liquid enters



*Sectional view of Gallion vaporizer, showing by arrows gas flow*

the cylinders. A mixer dial to be placed on the dash is included with the manifold. Two priming cups also can be installed at A. They save the annoyance of having to remove the plugs.

Still another new device to make every gallon of gasoline deliver its full mileage is the Apex pneumatic butterfly valve. With this device the volume of air mixing with the gasoline vapor flowing from the carbureter is operated mechanically with the regulation of the engine speed through the operation of the throttle. In the illustration, A is the regular carbureter throttle lever; B, the aperture through which the air is drawn down to the split butterfly valve; C, adjusting screw for regulating idling speed of engine; and D, split butterfly valve through which air is drawn into the mixture. When the engine is started the Apex throttle delivers air very slowly, giving a rich mixture for quick starting. As the throttle is opened for more speed, the device delivers a much higher percentage of air, it is claimed, than the ordinary butterfly valve.



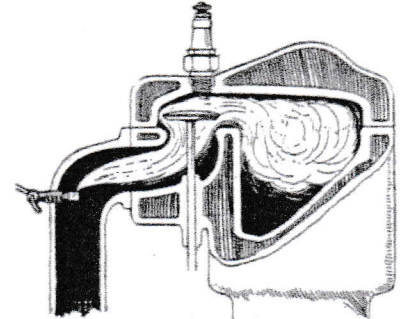
Easily-made primer, designed for use on engines fitted with vacuum systems

Apex pneumatic butterfly valve designed for use on Fords

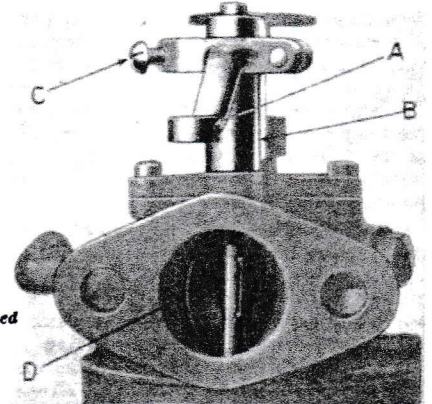
**The Jorgensen Primer**

The market affords many different styles of priming devices and here also one notes improvements. For instance, the Jorgensen vapor primer made by the Jorgensen Mfg. Co., Waupeca, Wis., does more than simply drop gasoline into the intake manifold. It shoots the liquid in the form of a spray directly toward the intake valves, as shown in the illustration. This is accomplished by the construction of the nozzle screwed into the manifold. The nozzle is made with a very narrow slit, and installation always is made with the slit on top, in which position it points toward the valves. The result is that when the plunger is operated on the dash the spray is thrown into the vicinity of the intake, where the plugs are located as a rule. This gives the spark a better chance to get at the spray thus introduced and insures quicker starting. If manifolds are primed in the usual way, much of the fuel runs down into the carbureter and has to be drawn up by the suction.

Speaking of primers, those motorists who have a vacuum system easily can install a primer of their own make, as shown in one of the illustrations. This is not so good as the bought articles and means that you must open the hood and pour the priming liquid into the cup, but it beats taking out the plugs. Of course, this is only for engines not fitted with priming cups. To make it, remove the fitting usually screwed into the tapped hole of the manifold and screw a 1/8-in. pipe nipple into the manifold. Then put on a tee, into the open end of which put the fitting you unscrewed from the manifold. Then put a priming cup in the top of the tee, and the primer is made.



How the Jorgensen primer sprays fuel toward the intake valve



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Type "E" 15-20 h.p. \$2800  
Type "D" 20-25 h.p. \$3700  
Type "H" 30-35 h.p. \$5000  
Type "F" 40-45 h.p. \$7500

Address factory or any branch office for descriptive matter and detailed information.

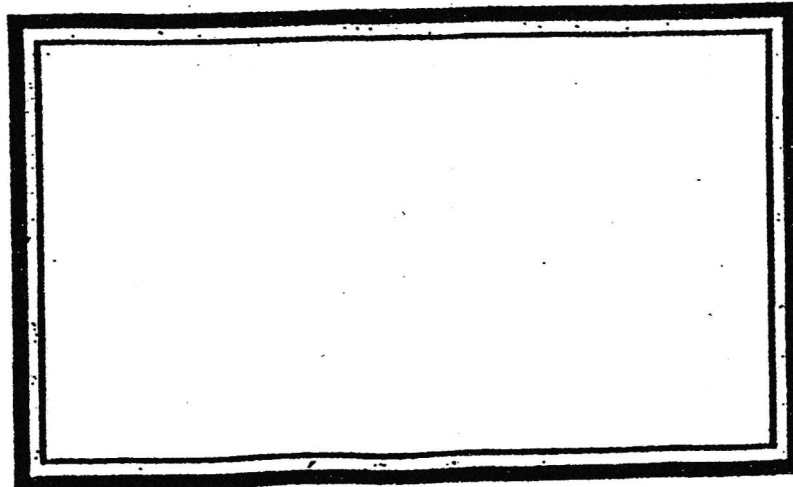
The car with four-cylinder vertical motor, sliding gear transmission, and automatic carburetor has become standard. Every automobilist who hasn't one, wants one. At the same time he doesn't want an experiment. Now we have been building this type of car for three years, and our experience should make it easy for you to decide.

NEW YORK—Broadway, corner of 76th St.  
PHILADELPHIA—No. 249 N. Broad St.

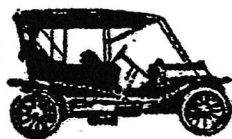
The **Locomobile** Company of America, Bridgeport, Conn.  
Member Association of Licensed Automobile Manufacturers

CHICAGO—No. 1324 Michigan Ave.  
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H. C. C. A. Santa Rosa  
P. O. Box 3993  
Santa Rosa, CA 95402



# Happy Birthday



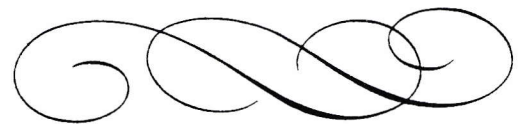
MAY 10 VICKY PORTER  
MAY 13 WAYNE SIMONI  
MAY 22 RON WELSH  
MAY 22 KEN LARSON



# Happy Anniversary



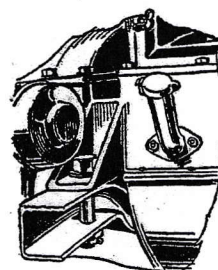
MAY 6 DARYL & LINDA EGGLESTON



## 43 MOTOR SUPPORTS

Very often the anchorage bolts of motor supports work loose, causing annoying squeaks, motor pounding and inexplicable vibration.

Apply lubricating oil to the base of the supports and pull the bolts up as tight as they will go, making sure each nut is securely fastened with a cotter pin or lock washer.



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ECONOMIES  
FOR  
THE MOTORIST