



#### FROM OUR PRESIDENT, DAVID STONE

Hi All,

Here we are at the end of the classic car season, cars tucked away for the ensuing cold weather. Thanks to all who made it out to last months Gypson Tour, the fall foliage ride was fun. Duane put together a nice 40 mile loop through the hills of Enosburg and Franklin, Vermont. We wrapped up the ride with a potluck lunch at Mr. Fiske's shop and a walk through his collection. Our next event is the annual meeting November 5, see our events section. We will be discussing the Waterbury and Shelburne shows, budget, election, and Educational Outreach projects and other committees. Please consider the Holiday party on December 2nd.

On a side note, when I was driving the back roads of Vermont this summer, my journey brought me to Proctor, VT, I stumbled upon Wilson Castle, an 1867 built mansion. Awesome architecture and a vast collection of English and European artifacts. What a fantastic find, I immediately thought what a great venue for a gathering of old cars. This might be a neat club event. Check out the website, wilsoncastle.com. Getting there is half the fun, your trip will take you over a few covered bridges.

So, cold weather doesn't mean down time for the club. Yes, our cars are sleeping, but behind the scenes, planning is taking place for warmer days. Hope you look forward to our activities throughout the year and get those winter projects done.

Happy Holidays, Dave Stone



February 1943.....Members of the Women's Safety Traffic Reserve in Oakland, California, school crossing guards

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#### FROM YOUR EDITOR ... GARY FISKE

Wheel Tracks Monthly deadline The 10th Membership Only \$30 \$50 for 2 years

The Hershey Car Show was its normal, unbelievable, event. In my two and a half days there, I found some great treasures among the 9,000 vendor spaces. The 250,000 visitors had 1500 collector cars and

1000 more in the car corral to look over. It was a fantastic experience.

I have to also say, there was a major wake-up, for this "oldish" editor in my first year sleeping in a tent on the show grounds. The last time I showered in a public environment was on a destroyer in the Navy. All mostly young folks then, but fast-forward 50 years and WOW. Along with bald heads and pot bellies, almost no one had....huh...you know, rear-ends or some call, buttocks! Then I walked by a mirror and guess what, I looked just like everyone else!

I made the mistake of locking my glasses in the locker along with my valuables and had a heck of a time getting back in. Two others offered to help and here we were, three old farts, in our towels, bent over, trying to get the darn combination lock to work. My grand kids have a term for that......"helloooo"!

Then I was told a story about another VAE member, who ventured into those same public showers and forgot the combination to the lock. He had to pad, bear-footed, out to the lobby wearing only a towel to get someone with bolt cutters. That story made me feel much better about myself.

We have had some wonderful club gatherings lately. The day we spent with Sarah and Bill Cooke was fantastic. Their Steam Car 101 gathering was great but their Stanley Steamer stole the show.

Adam Routhier's business "Finish Solutions" has added a word to its name along with a new location in the Burlington Interval. It is called "Eco Finish Solutions" now and our gathering with him was a great education for us. AND, the year is not over yet, turn to page 14 to learn more. Jan Sander is working hard in her coming position as 1st. Vice President to make 2018 memorable also. That same event line-up will give you some previews.

Wolcott, Vermont, August 21, 2017.....Mary Jane MacCleave Dexter of Wolcott, Vermont, died peacefully at her home in Wolcott where she had lived most of her years since 1950. She was born in Brockton, MA, in November, 1923, the daughter of Marguary Cochran MacCleave and Howard Maxwell MacCleave and sister of Howard Maxwell MacCleave, all who predeceased her. She is survived by loving nephews and nieces and cousins, many friends and a number of interesting godchildren. Mary Jane attended Thayer Academy, Braintree, MA, class of 1941, then class of 1941-1943 at Skidmore, graduating from the University of New Hampshire, cum laude, in 1945. She was a social worker and camp director at the North Bennett Street Industrial School in Boston. During WW II she was a welder at the Foreriver Shipyard in Quincy, MA. From 1953-1968 she taught in the English Department at Eaglebrook School in Deerfield, MA, then at Hackley School in Tarrytown, NY. Her last full-time teaching job was at Rumson County Day School in New Jersey.

Mary Jane married William Gregory Dexter on August 2, 1961 and their busy life together began. They shared great enthusiasm for education and loved children and learning.

Ever fun-loving, she adopted her husband's passion in the local Vermont Automobile Club for antique cars. They were keen members of the National Woodie Club and the Early Ford V-8 Club. Locally, they were members of the Northern Rivers Land Trust. St. John the Baptist Episcopal Church was important to M.J. She served as Senior Warden and on the altar guild and was also a vestry member.

Bill died in 1991. M.J. continued to live at West Hill with her golden retriever, Molly. Bill and M.J. will be on their favorite sweet slopes of West Hill.



Wheel Tracks is a monthly newsletter published in print and electronically for the public, and for the VAE membership, a 501c3 a Not-for-profit Inc.

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#### "THE SOFTER SIDE"

A Column Shared by Mary Noble (Left), Judy Boardman (center) & Nancy Olney (Right)

#### This is the season for church suppers...... from Judy

This is the season for church suppers. There are church suppers everywhere...the most popular are chicken and biscuit suppers, but once in a while you will read about a ham dinner or even a game dinner. We've been to several in the past month and they are wonderful! A lot of the churches have been putting these suppers on for generations. They have become so popular that reservations are now required. Sometimes there are three "seatings" with take-out available. If you don't have reservations, you need to get there early. They are usually served family style with refills all the time. We've been to a few with friends and it is a great way to see the foliage, visit with friends and catch up on the local gossip.





The season for ice cream socials is over, but

they are good and lots of fun, too. Often there is music to go with the event which is a nice added feature. Another thing that is happening in recent years are the monthly community suppers that are usually held in local churches and put on by the members of the local church. They are usually free, with a donation basket at the door. You could go to these almost every night of the week if you don't want to cook. After years of cooking or trying to think of what to cook, the thought of going to these suppers is getting more appealing to me every month. The local church has been hosting these suppers once a month for a number of years now and we rarely miss one. There is a group of us that get together at this supper and you get to visit with people who live in town that you might not see otherwise. Every month there is a different menu and you never know what is being served, until it is posted on the FPF or the Clark's Truck Center notice board in Jericho, where local events can be posted for free and it is seen by all who travel Route 15.

The Knights of Columbus put on breakfast once a month at a local church that are wonderful. It is another meal where there is a donation basket and the proceeds go to a good cause, whether it is local or not. This is another one we rarely miss, with the same people going, and we usually fill up a whole table...people who we might see only at these

breakfasts. You can refill your plate as much as you like, although usually the first pass-through is all that you can eat. Although there might be seconds for bacon. Twice a year, the K of C puts on dinners instead that are delicious. Here, again, they are so popular that reservations are suggested. This also is the season for beer fests and they seem to be happening all the time now. With so many small local breweries and people making their own beer, they are all the rage. The one that takes place in Underhill has lots of food, music, cider making, children's craft tables and has become a local family event. Rain or shine! Everyone out enjoying themselves before cold weather and darkness settles in and forces us indoors. You should get out the old car and go to one of these. You won't regret it.







Goutte d'Eau

A 'tear drop' body style, tapered to the rear.







An old, funny, rerun......

A drunk phoned police to report
that thieves had been in his car.
"They've stolen the dashboard,
the steering wheel, the brake
pedal, even the accelerator!" he

cried. The police were dumbfounded and dispatched an officer to the scene. However, before the police arrived, the phone rang a second time and the same voice came over the line. "Never mind," said the drunk with a hiccup, "I got in the back seat by mistake!"

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WHAT DOES A TORNADO AND A REDNECK DIVORCE HAVE IN COMMON? SOMEONE'S FIXIN' TO LOSE A TRAILER.

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Homer and his wife entered the dentist's office. "I want a tooth pulled," he said. "We're in a big hurry, so let's not fool around with gas or Novocain or any of that stuff." "You're a very brave man," remarked the dentist. "Which tooth is it?" "Show him your bad tooth, honey," said the man to his wife.

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After enlisting in the 82nd Airborne Division, I eagerly asked my recruiter what I could expect from jump training. "Well," he said, "it's three weeks long." "What else?" I asked. "The first week they separate the men from the boys," he said. "The second week, they separate the men from the fools." "And the third week?" I asked. "The third week, the fools jump."

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I looked up the word "politics" in the dictionary, and it's actually a combination of two words; "poli," which means many, and "tics," which means "blood-suckers."

## Wheel Tracks Academy

#### Buzz Coils and How they Work

Other names used are trembler coils or vibrator coils and they are a type of high-voltage ignition coil used in the ignition system of early automobiles.



The type many of us have seen before is the Ford Model T coil pictured to the left. All operate basically the same and today we will use the "T" coil in this academy. There are two "buttons" on the side, the top one is where the 6 volts from the battery (or magneto) goes in and the bottom button is where the 10,000 volts come out to make the nice

blue spark at the spark plug. There is a similar button on the bottom of the coil box that is connected to the vehicle frame for electrical ground. All three should be cleaned for good connection to the taps they press against in the vehicle. Inside the coil box is the coil and the condenser where both are normally incased in a hard tar-like substance. The condenser helps the tungsten points from arching too much and burning. There are two coils, the primary where the 6 volts goes through and the secondary where the 10,000 volts is created.

On the top is the "buzz" part of the "buzz coil". When the "distributor" (sometimes called the "timer") decides the spark plug needs a spark, the coil starts to buzz. In the case of a Model T, there are 4 coils and



four spark plugs, all taking their turn, buzzing and producing a spark. The picture on the left is the part of the coil that makes the buzz sound where the points are located. The top point is

attached to the "bridge" where a space of .005 of an inch must be maintained the full length of the "cushion spring".

The lower part of the points are attached to the vibrator bridge, where a space of .031 of an inch, needs to be maintained between the points when the vibrator is held against the coil below it. When in operation, the vibrator is pulled down by the magnetism of the coil which shorts out the electric circuit, then pops back up, closing the points....thus causing those nice blue sparks at the plug. By turning the nut you see on the right in the picture and bending the metal up or down where the vibrator bridge is attached to the coil box, you can adjust for spark quality.

Most of us don't have the meter required to make sure the condenser is not leaking and the primary coil is only drawing 1.3 amps of current. So we have to rely on producing the best "blue" spark on our work bench spark plug... then happily put-putting down the road in our old car.



#### Continued from front page...



"In the beginning....it was an Austrian Haflinger. The Haflinger was a series of 4x4 light utility vehicles, produced by Steyr-Puch. It was designed to replace the WWII era American jeeps. The Haflinger vehicle is named after a breed of Austrian horses, that are small, but well-muscled and energetic. The vehicle was produced at Graz in Austria. Production



commenced in 1959 and ceased in 1975. Over 16,000 of these light utility vehicles were made. It was widely used by the Austrian Army.

The Pinzgauer was developed by Steyr-Daimler-Puch of Austria as the successor to the Haflinger of 4x4 vehicles. The first 4x4 Pinzgauer's prototype, powered by a 2.5-liter gas engine, was produced in 1965. Series production commenced in 1971 and ever since then, the Pinzgauer series has been a major Steyr-Daimler-Puch product. The baseline Pinzgauer 710 had 4x4 configuration. It was soon joined by a Pinzgauer 712 with 6x6 configuration. The 6x6 model was first revealed in 1968 and entered production in 1971-1972. The Pinzgauers first entered military service with Austria in 1973. Another major operator was Switzerland. By 1985 over 20,000 had been produced, nearly for all military users.

From 1983 onwards the gas-engined Pinzgauers 710 series and 712 series were joined by turbocharged diesel-engined versions, the so called Turbo D range, which in most respects were overall improvements on the earlier models. They are known as 716 series  $(4\times4)$  and 718 series  $(6\times6)$  and have longer wheelbases, disc brakes and increased fuel capacities. Other features such as automatic level control systems, that enable the superstructure to rise or fall, to suit the load involved also became available. Since 1986 the original Pinzgauers were replaced in production by the improved 716 and 718 series vehicles.

Wheel Tracks first spotted the truck during our Appreciation Picnic on Farr Field in the Spring. Before the camera and note-book was readied, the truck and it's mysterious owner was gone...... All inquiries came up negative, mainly because the right people were not asked. Then the odd looking truck turned up at the train station at our Shelburne Show. The GMMVC new all the time!

Hank Baer is the owner and Pinzgauer is his ride. Hank purchased the truck just a few years ago and the vehicle has become his main "go to the show vehicle" since then. It is set up as a communications vehicle and even short-legged folks, like the editor, can have a ride....note the hike-ups sticking out the front axel. The gas engine has four cylinders, is air-cooled and produces 90 HP. It weighs just over 2 ton and can carry an additional ton with a highway speed of around 70 MPH.

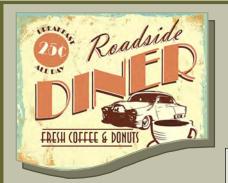


All Pinzgauers are four-wheel-drive or six-wheel-drive with on-the-fly hydraulic differential locks, fully independent suspension backboned chassis tube. They have integrated differentials, 24 volt electrical system, vacuum assisted drum brakes and portal axles to give extra clearance.



Membership in the GMMVC plugs you into Vermont's statewide military vehicle restoration community. You don't need to go at it alone! The annual dues of \$20 gets you on the meeting minutes mailing list, discounts on club activities, and a fancy membership card autographed by **Bob Chase!** GMMVC welcomes new members from all walks of life, without regard to age, sex, religion, ethnicity or taste in paint color. The only prerequisite is an interest in historic military vehicles. It is not a requirement to own a vehicle (although we bet you will sooner or later!) Over 10,000 Military vehicle enthusiasts are involved in this same hobby nation wide. This group of people has informally developed an international camaraderie. GMMVC is a registered non-profit corporation and does all its work and events with volunteers.





## The Roadside Diner

#### Best-Ever Meatloaf



Edi Fiske

- 1 1/2 pounds ground chuck 1 cup fresh bread crumbs 1 onion chopped 1 egg
- 1 teaspoon salt or less 1/4 teaspoon pepper 1/2 (8 ounce) can tomato sauce

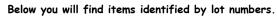
#### Sauce:

- 1/2 cup water
- 3 tablespoons vinegar
- 3 tablespoons brown sugar
- 2 tablespoons mustard
- 2 tablespoons Worcestershire
- 1 1/2 (8 ounce) cans tomato sauce

Mix loaf ingredients thoroughly and pour over meat; or reserve some, simmer it 10 minutes and serve with the meatloaf. Bake at 350 degrees for 1 1/4 hours, basting with sauce. Let loaf sit for about 5 minutes before slicing.



## **★** The VAE November Email Auction



If you would like to make a bid simply email **gafiske@gmail.com**, state the lot number and place your bid.

There are no reserves and on the 10th of <u>November</u> the bidding will close.

The winning bidders will get an email telling them where, in Milton, Vermont, they can pick up and pay for their items.

Possibly because there was no October issue of Wheel Tracks, there were no September bidders.

Lot 9-8 is from the Alden Chapman collection, a great piece.





Lot 9-1 Misc. Box A guess value of over \$35.00



Lot 8-2
5 radiator treatments,
4-lead substitute,
3 engine lubes & 4
motor flush



Lot 9-3 8 qts. Of heavy gear oil



Lot 9-4 One Gal. plus three-12oz cans of Dot 3 brake fluid



Lot 9-5 55 ozs Of Dot 5 brake fluid



Lot 9-6 15 Qts. 10W33 oil



Lot 9-7 17-12oz. Cans Dot 4 Brake fluid +++



Lot 9-8 1886 Benz Motor Wagon Model



Lot 9-9 12 qts. 15W40 Oil plus 1 gal of diesel fuel conditioner



Lot 9-10 11 Qts. 20W50 oil





### Dave's Garage by Dave Sander



#### Alternator Maintenance

I recently had a Subaru Outback in the shop for some extensive maintenance. I had to remove the alternator to do this work. The car had 185,000 miles on it, and still had the original alternator. I decided I would utilize the time waiting for parts to do

some preventative maintenance, and overhaul the alternator while the car was in the shop. A rebuilt alternator for this car is about \$200, with a new one over \$400. The parts to overhaul this alternator were about \$30.

How does one overhaul an alternator? Usually when an alternator wears out, it is due to the wear items reaching the end of their useful life. The wear items in an alternator are the brushes and the bearings. On this alternator, like many alternators, the brushes are part of the regulator assembly. While new brushes can be soldered in to the existing regulator, it is far easier to replace the assembly as a unit.

I ordered the parts on line. Surprisingly, I have found most parts stores do not sell alternator rebuild kits. I have to buy them from automotive electrical or electric motor parts suppliers.

An examination of this alternator revealed the brushes were well worn, almost at the end of their useful length. Both bearings rotated freely, however sounded and felt slightly "gravely" when rotated. The rebuild kit came with both bearings and a brush/regulator assembly.

Rebuilding of the alternator was very straight forward. First, I removed the drive pulley with an impact wrench. The pulley easily slid off. Next, I opened the case by removing the four bolts holding the case together. The front of the case came off after several light taps with a hammer. I carefully compared the old parts with the ones that came in the rebuild kit to ensure I had the right parts. Once the front of the case was off, I removed the four screws that held the front bearing plate on. These screws required the application of a torch to free them, but came out easily once some heat was applied. The front bearing came out of the case easily, with a gentle push from my thumb. The new bearing easily slid into position, and was secured with the four screws and the retaining plate.

The rotating assembly was removed from the case next. A careful inspection of the slip rings showed they were in good condition. There had been no arcing against them from the brushes. The rear bearing needed to be removed from the shaft in the press with a bearing knife and a drift. Great care is exercised to prevent damage to the assembly. The new bearing easily pressed on to the shaft.

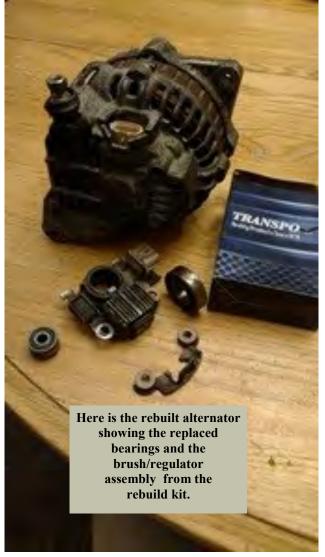
The brush/regulator assembly is soldered into the case. I needed to melt the old solder connections with a soldering iron. Careful inspection showed the remaining parts of the alternator were in good condition. I carefully cleaned the alternator case while it was apart, rinsing all pieces with electrical cleaner.

I mounted the new brush/regulator assembly in to the case, and soldered the connections with electrical solder. The brush assembly came with a small wire to hold the brushes in place. It is important to leave this wire in place, and carefully thread it through the small hole on the back of the alternator

assembly. It is impossible to mount the rotating assembly into the case with this wire removed, as the spring loaded brushes will interfere with the slip rings upon reassembly.

With the brush/regulator assembly installed, the alternator can be reassembled. After assembly, it is important to ensure the alternator spins correctly, with no noise or interference.

This is an easy and inexpensive preventative maintenance step.







#### VAE Gossip by GCF

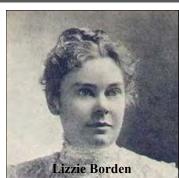




A friend found this hatchet in a box-lot she purchased at an auction lately. The handle was split and the steel was rusty. Instead of letting her throw it in the trash, it ended up at my place and with a little elbow grease, it has a new life as a fine tool and a top-notch splitting edge. It was made by Underhill Edge Tool Company in Nashua, New Hampshire while it was in business between 1815 and 1882.

One of the company's axes was used by Lizzie Borden in 1892

to murder her father and stepmother. How does the rhyme go....... "Lizzie Borden took an axe; And gave her mother forty whacks. When she saw what she had done, She gave her father forty-one." It was determined during her trial that she, in fact, whacked her step-mom 18 or 19 times and her father 11 times.





There was a lot of steam created on the 27th of August. Sarah and Bill Cooke's Stanley steamer was really something! However, that is not steam in the picture on the left, it is tire smoke. This photographer was not fast enough, to catch the Mustang that was in the middle of the smoke (it produced), about 2 micro-seconds before the picture was taken. One of our 'respected' club officials owned the foot that was on the accelerator. Steam is much nicer smelling than burnt rubber.

Vin Cassidy's vendor space at Hershey was the normal busy bee-hive this year that Vin naturally creates. I met a number of super interesting new acquaintances and listened to many tales on trucking and old car stories. Many of the folks were members of the Antique Truck Club of America based in Barrington, NH. Along with Gary Olney and Butch Harshorn was the camp cook, Bill Harley. Al Murphy, Brian Main, Dick Qwak and Don Smith were the folks whose last names I have. There was also Craig from

Arizona and Charlie...,sorry I don't have your sir-names. One truck story that was very interesting was about a former fire department tanker truck being used as a snow plow. You might know that when you are pushing snow into a bank and you hit the bank too hard, the plow will get hung up, leaving you unable to back away. This "Cassidy Camp Story" told about having the tanker snow plow partially filled with liquid, so when you hit the snow bank and shifted real fast into reverse the liquid load would help you heave back out of the snow bank. Only "northern" folks could come up with a fix like this!

As I was driving off the grounds of the Hershey car show and making my way to I-81 and a really neat motor home was fallowing me. A motor home just like the '74 GMC that was given to our club a while back, that the club wants to sell. A friend recently paid \$65,000 for a tow-behind camper trailer and another friend paid \$82,000 for a class A motorhome. They are both nice but can't compare to this GMC for comfort, style and history. A few years ago I had a tour of a GMC motor home that the owner had personalized with tile floors, wall panel and other home-upgrades in their 40-year-old motorhome that



really impressed me. I am not the motorhome type but as I watched the GMC in my rearview mirror, I was thinking how I could buy the club motorhome for peanuts and even put \$20,000 into repairs and upgrades; and have an eye-catching motorhome to tour the country with. Hard to believe someone in our club hasn't come to this conclusion also.



Some know him as "Sparky" from his work at keeping our car show sound system together over the years. Nick Nadeau is his name and this fire truck pictured (left) tells us he has also caught the virus that VAE members have. Wheel Tracks was told the fire truck is a 1976 Maxim with a 309 Cummins under the hood. We believe it was a former Charleston, VT tanker where Nick found it in North Wolcott.

We also understand a flat tire on the drive home to Fairfax brought the town of Fairfax and **Duane** Leach to Nick's rescue. Shouldn't it be the other way around?

The Maxim Motor Company was an American automaker headquartered in Middleborough, Massachusetts and started building fire trucks in 1914 until they went out of business in 1989. Congratulations on your purchase Nick.



Wheel Tracks...vtauto.org

#### The Dog House ....

Like all car makers, their engineers are always experimenting to make automobiles better. Here is a peak into their everyday job in the early 1920s. The following are snippets taken from a 1958 article written by an H.H Franklin engineer, Bill Gale.

The H.H. Franklin Manufacturing Company's research laboratory was very similar to other highly engineered automobile companies of the day. Every engine coming off the production line served its time in the "run in" room. Part of the lab contained a number of engine mounts lined up in pairs facing each other. When a new, or raw engine, came in, it served its time on these mounts in two steps. First, it was connected crankshaft-wise with another engine on the facing mount and "driven" for a certain length of time. Second, it was started up and did its stint as the motive power to rotate another new, raw engine. At the end of



the second run-in period, the engine was ready to be placed in a chassis and start down the assembly line.

Before the research Lab was built there was the "Dog House", a small one story wood building that stood in the factory yard surrounded by the huge factory buildings. For all the world, it really did have a slight resemblance to a "Dog House". This building housed three complete and separate Dynamometer test stands, so that three engine tests of various kinds could be carried on simultaneously. All young student engineers did our stretch in the "Dog House" as part of our factory training. We assembled production engines, ran them in and set up various tests for purposes of determining how much abuse they would take and still keep running.

When we were not busy on the Dynamometers taking reading and making adjustments, we might be assigned the job of painting the inside wall and roof of the "Dog House", or spelling off the road test boys in the factory or any other odd jobs that came along. When a wear test was organized, the single boys were assigned the night shift in pairs and the married boys got the day shifts. You see, a wear test meant running the engine continuously twenty-four hours a day, day in and day out, until it turned over the equivalent revolutions to 10,000 miles or went to pieces somewhere along the line. When I say "went to pieces", I mean just that. Once an engine developed a pronounced knock, none of us stood at the side of it. I have seen more than one engine throw it's parts all over the Dog House. That is why we had to repair and paint the Dog House walls and ceilings a few times each year.

Each car that came off the assembly line in those early days of the 1920s was given a thorough road test by two drivers. The test drivers always operated in pairs. They would gas up two cars, hang on license plates and drive a particular route through Syracuse until the speedometer read 25 miles. At that point they would stop, check a huge number of items listed on the test card, crawl under the car and tighten any loose body parts. Then they would change cars and do the 25 miles back to the factory where the test cards were completed again. The test drivers did four of these tests each day adding up to 200 miles per day and about 1100 miles per week. A pay envelope in those days contained \$24.00 for five and a half work days, nine-hour days, Monday through Friday and a half day on Saturday.

Many test were conducted in the Research Lab. One was where we connected 34 thermocouples to different locations on the air-cooled engine. We ordered glass pipes from Corning Glass Works and inserted them between the exhaust ports and exhaust manifold. By darkening the room, the color flame of the combustion of each cylinder could be observed. A reddish color would indicate a rich mixture while a thin blue flame indicated a lean mixture. We developed different sizes and shapes of manifolds and baffles to create an even gas mixture.

One day in 1924 a man by the name of Powell sent a new type of muffler for us to test. It proved to be quite an ingenious assembly of sections, all six inches in diameter and approximately three inches long. Some of the sections were blanks and some were baffled, and all were interchangeable. We connected it to our test engine and started the test. When all parts of the engine had reached stable temperatures, we opened the throttle wide and loaded down the engine. Within a short period of time, the temperature started to drop (not increase)! This continued until back firing set in at the carburetor. What had actually happened was that this new muffler was not building up back pressure on the exhaust side of the engine and therefore, was letting all the heat of the combustion out. This allowed a whole new era of experiments to open for us. Since the muffler was capable of letting out greater quantities of exhaust gases than our present intake system was feeding it, we were free to increase the size of the carburetor. This led us to conclude the use of the Wilkenson carburetor and shift to the better suited Stromberg carburetor.

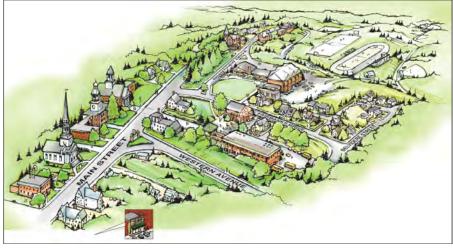




From the Ken Barber Collection An early 1930s photograph of the Crystal Lake House

Remember the "Wanted" ad in our last Wheel Tracks classified page concerning our two Harley Davidson golf carts?

The 2nd cart is now being restored by the Career Center Auto Tech Program at St. Johnsbury Academy. Bret Bourgeois called and asked if his students could have the cart as a winter project. The Academy has been one of the schools where the VAE Golden Wrench program has awarded five of its students over the past five years. The students were...2017- Brett Michiewicz; 2016- Michael Hooker; 2015- Andrew Augeri; 2014- Joe Bedor and in 2013 Jerry McClellan won the award. The



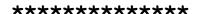
VAE is very fortunate to have this wonderful connection to Vermont's 16 Career Centers.

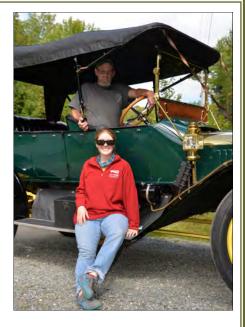
St. Johnsbury Academy was founded in 1842 by Erastus, Thaddeus, and Joseph Fairbanks. There are 220 on the school faculty list and approximately 1000 students where the average class size is 12 students. The 50 acre academy campus is pictured above.



A good number of club members had a great time at Sarah and Bill Cooke's place last month. They called it "Steam 101" and that it was! The talk was very interesting and their collection was super but....their 1912 Stanley stole center stage. Most of us had our very first ride in a steam car, an amazing experience.

Thank you Sarah and Bill for you hospitality and a Sunday we will always remember.







Adam Routhier at his new location is pictured left at 40 Interval Road in Burlington.

He had been there only a week when Dave Stone arranged for our VAE visit. Eco Finished Solutions now has huge ovens for powder coating and will be continuing their core business of abrasive blasting that Adam originally built his business around.

One nice piece of information that day was how there is a better blast cabinet medium than glass beads that easily turns to powder after a short use. That is 30 to 60 grit granite or garnet.

Also, check out **Picklex**...a product for rust control.





#### \*\*\* My Story\*\*\*

Is that it? You have no more stories for Wheel Tracks? We know for a fact that everyone of you VAE members did not have "sheltered lives"..... well we can think of only a couple.

So why are there no more \*\*\*My Stories\*\*\*?

The deadline for our next Wheel Tracks is November 10th. Could you put a story together for us? The column has become very popular, please don't let us lose it.

#### The Benz Patent-Motorwagen ("patent motorcar"),

**Built in 1885**, is widely regarded as the world's first automobile, that is, a vehicle designed to be propelled by an internal combustion engine. The original cost of the vehicle in 1885 was 600 imperial German marks, approximately 150 US dollars (equivalent to \$3,998 in 2016).

The vehicle was awarded the German patent number 37435, for which Karl Benz applied on 29 January 1886. Following official procedures, the date of the application became the patent date for the invention once the patent was granted, which occurred in November of that year.

**Benz's wife, Bertha**, financed the development process. According to modern law, she would have therefore received the patent rights, but married women were not allowed to apply for patents at the time. Benz unveiled his invention to the public on 3 July 1886, on the Ringstrasse in Mannheim.

About 25 Patent-Motorwagons were built between 1886 and 1893.



A gentleman by the name of Roger Bacon predicted the invention of the automobile. Mr. Bacon wrote this in the year, 1235.

"Machines for navigating are possible without rowers, so that great ships suited to river or ocean, guided by one man, may be borne with greater speed than if they were full of men. Likewise cars may be made — so that without a draught animal they may be moved with inestimable speed...and flying machines are possible so that a man may sit in the middle turning some device by which artificial wings may beat the air in the manner of a flying bird."

From "Automobiles, Start to Finish; F.M Reck (1935)



The Wheel Tracks auction item from Alden Chapman's collection started this discussion. Was the 1886 Benz Motorwagon really the first automobile?

Supposedly, there were some 100,000 patents in place in 1886 that had to do with automobiles. **For historians who think that early steam-powered road vehicles fit the bill,** the answer is Nicolas-Joseph Cugnot, a French military engineer who in 1769 built a steam-powered tricycle for hauling artillery. The vehicle's single front wheel performed both steering and driving functions, and it could travel at 2.25 miles per hour with four passengers aboard for about 15 minutes. At that point Cugnot's fardier à vapeur, as it was known, would need to rest in order to recuperate enough power to move again.

Some argue that the first true automobile was gasoline-powered. They point to not one but two inventors: Karl Friedrich Benz and

Gottlieb Daimler. The two men, who had never met previously, filed their patents on the same day—January 29, 1886—in two different German cities. Benz's three-wheeled vehicle, which he first drove in 1885, was the first to combine an internal combustion engine with an integrated chassis, while Daimler's motorized carriage (invented with his collaborator, Wilhelm Maybach) was the world's first four-wheeled automobile and featured the first high-speed gasoline engine.

In the United States, Charles Edgar Duryea (1862-1938) and his brother Frank (1870-1967) are credited in building the first automobile in 1893...pictured to the right. It had a gas powered, 4HP, two-stroke engine. The Duryea brothers set up first American car manufacturing company.





#### The VAE Officer Nominations for 2018....

Board Chair- Dan Noyes
President- Dave Stone
1st. VP- Jan Sander
2nd. VP- Duane Leach
Rec. Sec.- Charlie Thompson
Treasurer- Don Pierce
Board Members- Tom McHugh, Chris Barbieri, Dave Sander
All other current officers to remain the same.

If you want the latest
VAE events schedule,
John Lavallee invites
everyone to visit our
website (vtauto.org) and
click on "See all VAE
Events"

Please Update Your VAE Roster Information Today

Drop a note or email to Christina McCaffrey 89 Ledge Road Burlington, Vermont 05401-4141



# Coming VAE Events for 2017 & 2018

November 5th.... 1 to 3 PM.... Our Sunday VAE Annual Meeting at the Holy Family Parish Hall in Essex Jct. We will be discussing the Waterbury and Shelburne shows, budget, election, and Educational Outreach projects and other committees. Come join us...good food, great company.

December 2nd....... The December meeting will be held on Saturday, December 2 at 1:00 at Martell's at the Red Fox which is located at 87 Edwards Rd in Jeffersonville. We will order off of the menu. Choices include appetizers, burgers, & sandwiches. There will be a gift exchange for those who wish to participate. Please keep the gift value in the \$10 - \$20 range. Please RSVP by November 25 to Jan Sander at 802-644-5487 or sander@pshift.com. Edwards Rd is a left turn from Rte. 108 about 3 miles south of Jeffersonville village. It is about 1 mile before Smuggler's Notch resort.



January 6th.... Our January meeting will be on January 6 at St. Leo's Hall which is behind St. Andrew's Church on Main St in Waterbury at 11:00. This is our annual models, collectibles, & memorabilia meet. It will be a pot luck dinner. This meeting will be held in conjunction with the Green Mountain Region of AACA. Gene & Lucille Napoliello will be our hosts.

January 8th.... VAE Board meets at Whitney Hall in Williston, at 7PM.



## Wheel Tracks Classified

Wanted.....Looking for an ambitious, honest, antique car loving handyman to continue a part time business of repairing temperature gauges. Perfect match for a retired person wanting extra income while having fun. Steady business and expandable.

Roy Martin 802-862-6374

**For Sale....**Three 19 inch Chevrolet wheels, two with hub caps. Good buy \$50.00 or Make offer.

One solid rim tire. It is two and one half inches by 31 inches.

**These items recently added....** 1 pr. of 1930 Ford front fenders, \$25.00 each. 1 Pair of 1929 Ford front fenders, \$25.00 each, 1930 Ford car frame, OK for street rod use, \$50.00

Ellie Ball 802-425-3529 or ellieb@gmavt.net

For Sale.... 1952 Ford F-1 half- ton pickup nice condition \$13,500,

**1967 Harley Davidson** FLH Electraglide nice condition \$12,500.

More info and photos at http://sites.google.com/view/vermontearlyauto/home

AFTER 50 YEARS, ITS TIME TO CLEAN OUT THE BARNS! CHECK OUT VEHICLES FOR SALE Bill Fagan, Call 372-6521

Wanted.....A front bench seat for a 2-Door Chevrolet. 1955 through 1957 works fine. I want to get my high school ride back on the road after 30 plus years. Jim Derosia, Bakersfield, VT. 802-827-3834



Genoa, Nevada (1940)..... High school boys in their jalopy

## November Bumper Sticker...

When I get old,
I am going to
Move up north and
drive around real
slow

#### Do you need a VAE name tag? Contact Christina

christina.mccaffrey@vtmednet.org

How about a VAE banner for your car? Call Wendell Noble to order one. 802-893-2232

#### OFFICIAL CONVERSION CHART

HOW TO INTERPRET

ANTIQUE CAR ADS

IF IT SAYS: IT REALLY MEANS:

Rare model...... Nobody liked them when new either

Older restoration.......... Can't tell it's been restored

Needs engine work...... It's been frozen for 30 years

One owner...... Never been able to sell

No time to complete...... Can't find parts anywhere

Needs interior...... Seats are gone

Rebuilt engine...... Has new spark plugs

May run...... But it never has

Low mileage...... Third time around

Many new parts...... Keeps breaking down

29 coats hand-rubbed paint... Needed that much to cover rust

Clean...... It sat out in the rain yesterday

Best offer..... About what I expect to get

Always driven slowly....... Won't go any faster

Prize winner...... Hard luck trophy 3 times in a row

o. 105

Stored 25 years............ Under a tree

Real show stopper..... Orange with purple fenders

Easy restoration...... Parts will come off in your hand

Ready to show...... Just washed it

Top good...... Only leaks when it rains

Good investment...... Can't depreciate any more

Submitted by Charlie Smith of Waterville, Vermont



#### VERMONT AUTOMOBILE ENTHUSIASTS Please Send Dues or Address Changes to: Christina McCaffrey 89 Ledge Road

**Burlington**, VT 05401-4140

christina.mccaffrey@vtmednet.org



Sarah and Bill Cooke's 1912 Stanley Steamer.



PRSRT STD U.S. Postage PAID Montpelier, VT Permit No. 61

Check your VAE Membership Expire Date beside your name

