The official newsletter of: Revs Institute Volunteers

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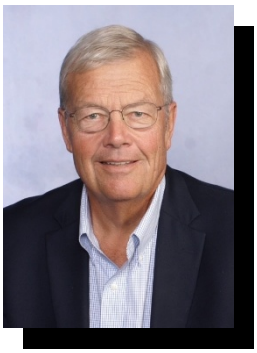
Inside this Issue:

Thank You to this month's contributors:

- Tom Dussault
- Chuck Shapiro
- Bill Vincent
- Scott Crater
- Whitney Herod
- Max Trullenque
- Joe Ryan
- Chip Halverson
- Anna McDowell

TAPPET CLATTER

Volume 28.3 November 2022



Chairman's Notes

By Chip Halverson

As we look forward to reopening we are also approaching the end of our year. In looking at your hours for the year you may be looking for additional chances to serve and get credit.

While our core mission is still to have qualified station guides and docents interpreting the collection for our guests, there are other opportunities to get hours and contribute to our mission.

Some of the opportunities with examples are;

- The parts department. Managing, sorting, cleaning and generally managing the inventory.
- The library. Scanning pictures and publications. Helping identify cars, drivers and tracks featured in the pictures.
- Occasional shop projects. Recent projects involved cleaning engines and parts used in classes.
- Outreach events. Attend volunteer recruiting events at schools and other venues. Speak at outside events in the community.
- Publishing research. Research and write reports for Adopt-a-Car and the *Tappet Clatter*.
- Helping with events in your area. Help out when cars travel to an event near you.

(Continued on page 2)

Chairman's Notes...continued

(Continued from page 1)

All of these activities are important to our mission and are eligible for credit hours. Contact Whitney to express your interest in any of these areas.

In closing I would like to offer a strong endorsement of the mentor program. This past season I worked with two new volunteers. I really enjoyed the experience. They were both well prepared and quick studies. Working with them caused me to look deeper at some of the cars than I had in the past and think about how I speak about them with the guests. If you have interest in mentoring contact Tom Dussault.

Looking forward to seeing all of you!

All The Best! *Chip Halvorsen*

Video Treat

The Porsche 911 Carrera Panamericana Special: One icon leads to another.
A short video about the La Carrera Panamericana's significance to the company. *Click on the Photo to View*

TAPPET TRIVIA

By Joe Ryan

This section is devoted to questions about the Miles Collier Collections cars or cars of the same period. Some of the questions might be a bit (very) obscure or (impossibly) tricky. Test your knowledge and *have fun!*

Just one question this month….

Question: What race car was considered the first V8-powered car to race at the Indianapolis 500?

The answers appear later in this issue

COORDINATOR'S CORNER

By Whitney Herod

Dear Volunteers, I know you've missed being together at the museum as much as we've missed having you here! As we anticipate the return of Volunteers for what we trust will be a busy season, the Revs Institute team has been busy preparing for the WFMM/NAAM Joint Conference, which 147 museum professionals are scheduled to attend. Plans for this monumental event began in 2018 and were postponed three times due to the global pandemic. Suffice it to say, we're eager to get the conference underway and to see our efforts finally culminate in a rewarding experience for all participants.

As a new year quickly approaches, it's time to review 2022 service contributions and plan for 2023 membership renewals. Our requirement is that each member serve a minimum of 60 hours over the calendar year. We sincerely thank each of you who have already met, and in many instances, far exceeded this requirement. The contribution of your time, talents and knowledge are cornerstone to the reputation of excellence for which Revs Institute is known.

A small number of members are in jeopardy of falling short of the minimum sixty hour requirement. As a reminder, please ensure you schedule yourselves to complete the minimum service contribution for calendar year 2022. If you have any extenuating issues or concerns, please do not hesitate to contact me to discuss them. In addition to the regular service opportunities on our open days, there are private tours on Fridays, evening events, library assignments and remote assignments writing an Adopt-a-Car report or helping with research. I'm happy to assist anyone who is looking for ways increase their service hours.

I will report that Jane Hamel will be leaving Revs Institute effective November 4th. Jane has accepted the position as *Exhibitions Coordinator* with the *Museum of Fine Arts Houston*. This will allow Jane to pursue her passion within the museum field. Please join me in wishing Jane much happiness and continued success with her future and in expressing our sincere gratitude for all she brought to our team.

I look forward to seeing everyone when we reopen November 17!

Membership Report

By Tom Dussault

The Membership Committee is as anxious as all of you for the reopening of Revs Institute. We have four potential new members to interview. We will present an orientation shortly after the reopening in late November to cover the museum and research library as well as volunteer guidelines, responsibilities, and benefits. We also emphasize the expectation that, barring any unforeseen circumstances, the initial mentor-based training should be completed within ninety days.

We will have at least eight participants including four who have already completed the interview process. We will introduce our newest members in the December issue of Tappet Clatter. They are looking forward to beginning formal training as well as meeting their fellow members.

As I mentioned last month, if any of you are interested in joining us for the Collier Volunteer Expo, please let Whitney know. We would be delighted to have you join us. The Collier Volunteer Expo will be held at Coastland Center, 1900 Tamiami Trail North on Thursday, November 3, 2022. It will run from 3 PM to 6 PM.

The Membership Committee is pleased to welcome E.J. Eckert to our team. E.J. has significant experience in executive recruitment and we appreciate him volunteering to help us.

Please continue to stay safe. We look forward to seeing you when we reopen in November.

Events Calendar

Event	Date	Info or contact
Volunteer BOD Meeting	Nov 21 @ 10:00 am	Sign up on VicNet
Revs Institute Re-Open	Nov 17 @10:00 am	Sign up on VicNet
PNC Bank Tour	Nov 22 @ 1:30 pm	Sign up on VicNet
Pella Winter Dinner	Jan 10 @ 7:00 pm	Sign up on VicNet
Volunteer Banquet	Jan 21 @ 5:30 pm	wherod@revsinstitute.org
Twin Eagles Country Club	Jan 27 @ 10:30 am	Sign up on VicNet
For a full list of daily tour groups and events, go to the 'Calendar of Events' on VicNet.		

Hurricane Ian Preparations

By Eric Jensen

In anticipation of the coming of Hurricane Ian, the Miles Collier Collections cars were moved to the newest but most secure section of the museum - the second and third floors. As you can imagine, it is a big job to move the first floor cars to share space with their cousins in upper Vitesse and Revs galleries.

Motor Trend interviewed Scott George for an article about the preparations. Click here to read it!

Photos Courtesy of Revs Institute

Why is a 32 Year Old Racer Racing a 50 Year Old Racecar?

By Chuck Shapiro

A little history might answer both of these questions.

I started racing in 1971 with an MGA sponsored by a dealership, Don Wylie Sports Car. Don made an arrangement for his own racing opportunity to move to a newer car, an MG Sprite. For $2500 I could buy the older car and the dealership would pay all the bills. We had two daughters, 6 and 4 and no money, but I had always dreamed of racing. The opportunity was now. It was a great 3 years before I got sidelined by a major car accident coming home from work on an icy country road. Knowing medically I couldn't go back to racing for some time, I sold the MGA. Wish I had not made that impulsive decision.

The next chapter with my love of cars and racing, evolved eventually to qualifying for my National Chief Stewards license in the 80s. I officiated all over the country, including being the Chief Steward for the National SCCA runoffs. My wife, Maxine, mostly went with me on my travels, with girls staying home with a wonderful surrogate Grandma.

Fast forward to 1993. Our oldest daughter was married with a 2 year old and 6 month old twins. Our youngest had just gotten married. Both off my payroll, the itch to go racing began again The parts manager at the Saab dealership where my company purchased cars told me about a "barn find" Triumph TR7 that could be had for $250. The deal was if I buy the car, I would pay for everything, he would do the work, and we split the driving time. It was a great partnership. Over the years the grandchildren would think of themselves as the pit crew (right). We raced the TR7 from 1993 to 2000.

The car was beginning to need a complete rebuild, my partner was having personal problems, and I was still very involved with stewarding and, yes, running a business. The TR7 was returned to a barn, and for the most part forgotten, I thought.

(Continued on page 7)

Photos Courtesy of Chuck Shapiro

32 Year Old Racer...continued

(Continued from page 6)

In 2018 while on a visit to us in Florida, our grandson Alex, told his Bubbie (grandma) that he wanted to go racing and what were the chances that Grandpa would give him the TR7. At first I discouraged him, insisting that the car was too old and needed everything. Not to be dissuaded, on our next trip to Grand Rapids, Michigan, Alex and I paid a visit to the barn and the TR7. The car rolled, and with some encouragement, the engine turned over. With access to a trailer, Alex took the car to his home garage and began learning about auto mechanics. He ordered manuals, parts, and some tools, but then like so many things, it began taking more of backseat to other endeavors. In 2020 the car began to take a more front seat and was moved to a larger space in one of the warehouses the company owned. Alex and some close friends who knew something about auto mechanics, began to put the car together. Sending the engine to a builder and buying new of almost everything, and learning the hard way through experience that skimping on the little stuff can be the most disappointing.

The car was ready to go racing this past season, Alex racing in the car I raced! We flew to Michigan for his first race at Grattan Raceway Park. I didn't realize just how important it was to me seeing him for the first time out on the track where I had raced in that TR7. The whole family, parents, fiancé, sisters, our grandsons, aunt and uncle came to show their support. Like the old days with my family pit crew.

Alex and the family (left) came to Road America to race in the July vintage race, where I have served as the Chef Steward for the past seven years. I was nervous for him to be on that "big track" and for me, too. He did well until one of those "small parts" BROKE. Lesson learned. Most of all, exciting for me. A big plus, the family was introduced to Schwarz's Super Club in Saint Anna, a Road America institution.

Alex finished this season at Grattan Raceway, my old home track. I was fortunate to reconnect with some old acquaintances who are still around. None so lucky as to have a grandson racing. Seeing that old TR7 going around those corners was truly déjà vu. New brakes have been ordered and other rebuilds will go on this winter.

We are both looking forward to next season.

The Porsche Gallery Bookends

By Eric Jensen

Courtesy of Revs Institute, Perter Harholdt Photo

The first car that greets visitors in the Porsche Gallery is a very rare, aluminum-bodied Porsche 356SL fitted with its rally equipment and markings.

Porsche was a very young car manufacturer in 1951 having only produced cars from 1949 onwards. The 356 was developed as a road car, not a race car. Like many earlier cars of advanced design, nimble handling and sporting pretentions, these were cars that could and would be raced. Porsche encouraged competition with special performance enhancements from its Volkswagen derived flat-4 engine and lightweight alloy bodies. Porsche entered three 356SLs in the 1951 Le Mans 24 Hour race. A first for the fledgling manufacturer and their first win in the 1.1 liter GT class.

Fitted with a 1.5 liter engine, the gallery car posted a class win in the rally emblazoned across the body. The car is presented in the livery of the Liège-Rome-Liège Rally, a grueling 4,719 km (2,932 miles) endurance contest run over six days with the drivers getting very little sleep.

The Liège-Rome-Liège rally, nicknamed *La Marathon de la Route*, started in 1931 as a rally race over some of the most difficult mountain roads in Europe. Starting in Liège, Belgium, the teams raced to Rome, Italy and back to Belgium. The rally-race was run non-stop on public roads for a distance of between 3500 to more than 5000 km. Like many of the world's great races, the rally was used as a venue for manufacturers to test and, with luck, show off their durability and performance. This was Europe's toughest rally.

In the interest of finding traffic-free roads and diversifying the route, the Marathon de la Route was altered in 1961 to be run from Liège to Sofia, Bulgaria and back. In 1965, due to being deemed too dangerous to run on public roads (and the refusal of some countries to allow it to cross their borders) the rally was moved to a permanent race circuit. The 1965 Marathon de la Route was moved to the Nürburgring where it was run until 1971.

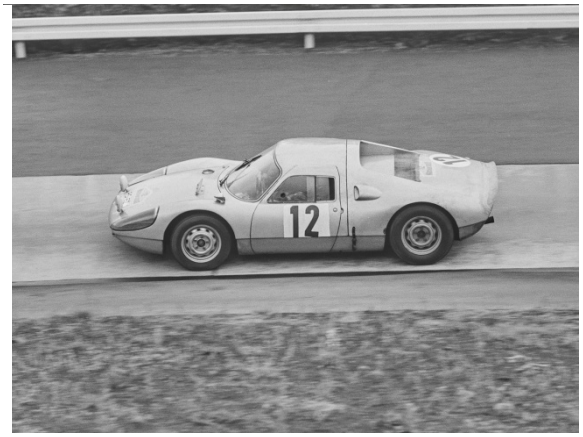
(Continued on page 9)

The Porsche Gallery Bookends...continued

(Continued from page 8)

It is at the Nürburgring where the focus moves to the last Porsche Gallery car; the 1970, 914-6 GT.

The 914 began as a joint venture of Porsche and Volkswagen. The 550 inspired mid-engine design was created to fill the gap left by the 4-cylinder 912 and as a "halo" sports car for VW. The car was sold as a Volkswagen-Porsche in Europe with its 80 horsepower, VW flat-4 or as a Porsche with a with a 110 hp 2.0 liter flat 6. The car was sold as an entry-level Porsche with either engine in the U.S. The car bodies were built by Karmann.



Porsche 904 in 1965 at the Nürburgring
Eric della Faille Photo
Courtesy of Revs Institute

The 914/6 GT was created by upgrading the brakes to 911S type, fender flares for wider tires, extra chassis stiffening, stronger suspension parts, a front mounted oil cooler, fiberglass bumpers and deck lid with a Carrera 6 style engine upgrade to 210 hp. The 914/6 GT followed the familiar Porsche formula. A road car with performance enhancements that could be raced in the most grueling of events; *La Marathon de la Route*.

Courtesy of Revs Institute, Perter Harholdt Photo

In August 1970, Porsche brought three cars to the Marathon de la Route at the Nürburgring. All 3 cars were fitted with 160 hp engines for durability's sake. The gallery car was fitted with standard 7 inch wheels while the other two had 8 inch wheels. The gallery car finished 1st in class and 3rd overall behind the other two Porsche entries at the end of this 86 hour race covering about 6200 miles. It performed as expected, spectacularly.

The 356SL and 914/6 GT form appropriate bookends for the Porsche Gallery filled with purpose-built racing machines. Both embody the "*racing as a matter of principle*" philosophy of the company. Both cars born of road cars. Both cars conquered the most grueling rally race; The Marathon de la Route.

Add Lightness—The Lotus Elite

By Bill Vincent

Over the years there have been many cars with fiberglass bodies. The Kaiser Darin, the Avanti, and of course the Corvette, to name a few. But they were all fiberglass bodies mounted on a substantial metal frame. The Lotus Elite is not.

The Lotus Elite that quietly greets people as they enter the Revs Institute, carries the use of that fiberglass to the extreme by skipping the use of that full metal frame.

Bill Vincent Photo

Yup, that Lotus is basically constructed around a full fiberglass monocoque!

For those not familiar with the details of what a monocoque is, you may have one of nature's best monocoque designs in your fridge. And that would be an egg. A monocoque is where the outer structure, or skin is the load bearing member of the chassis... Like the egg's shell. Popularized by aircraft, it soon became all the rave in motorsports, and later sports cars and supercars.

The Spa winning Gurney Eagle in the Revs gallery is another great example of monocoque construction, where the outer skin and the "boxes" formed to carry the fuel tanks, form the chassis of the car! The Lotus Elite was using that technology in a road car in 1962... made from fiberglass! Now, as a Lotus driver, you may not want to think about that too much.

It's often been joked about how Colin Chapman and his Lotus designs were always pushing boundaries, leading to many comments like: "LOTUS; Lots Of Trouble Usually Serious", or "As a Lotus driver it's best NOT to have any engineering knowledge", and similar. But it is the Chapman and Lotus mantra about "adding lightness" that laid the groundwork for so many great cars that followed!

Think of the Elite's fiberglass monocoque as the "grandfather" to the carbon fiber monocoque of the McLaren F1, in the neighboring display. Someone had to be "the first" and that was often Chapman and his Lotus team.

(Continued on page 11)

Add Lightness... continued

(Continued from page 10)

There are three main moldings, one being the shape of the Elite, that when bonded together form the Elite chassis. This is all basically fiberglass, except for a metal tube for the windscreen hoop and the front suspension and engine cradle frame mounts.

The front suspension is unequal length "A-arms" with a coil over shock. The front sway bar making up the front half of that upper "A-arm." The rear suspension is a version of "The Chapman Strut", which is similar to the McPherson strut design found on some modern cars (right).

Front Suspension is forward in the photo
Rear Suspension is to the rear

This all made up for a "spritely bit of kit" that weighed in at a tick over 1400 pounds that was pushed along by just under 100 horsepower. It was also pretty aerodynamic for the day too, with the bottom of the car as smooth, clean, and slippery (below) as most modern cars - if not more so!

Now - some thoughts to those brave Lotus owners of the time…

If you think Ralph Nader had a fit over the Corvair - he'd would have had a stroke over the Lotus! Things like the seats being secured to the fiberglass floor, as would the seat belts - if there were any! Like many British cars of the time, all that separated you and the car's fuel supply was a bit of cardboard, and in this case, fiberglass.

And "crush zones"… What are those? The occupants were pretty much the first to greet whatever they were about to make contact with! It is things like this that lead to the afore mentioned comments about it being better for Lotus owners to just enjoy their drives and not dwell to much about in what they were actually sitting!

(Continued on page 12)

Add Lightness ... continued

(Continued from page 11)

But it was a different time then - a time when drivers and car owners were still pioneers to a certain extent. The development of the car, as we know it, was barely past the halfway point to where we are now.

It's a time, I for one, kind-of romanticize over.

So spare a thought for that old Lotus Elite, as most people rush by it to see the younger McLaren F1. It was an important rung in the sports car ladder that got us to where we are today.

Peter Harholdt Photo
Courtesy of Revs Institute,

1965 Ferrari 250 LM

By Scott Crater

The story of our Miles Collier Collections Ferrari 250 LM might be traced back to the 1957 Cooper Climax T 43 Grand Prix car that resides in the Revs Institute. This is the homely, flyweight mid-engine car that Stirling Moss drove to a shocking victory in the 1958 Argentinian Grand Prix. It marked the beginning of the end for front-engined single seat race cars in the postwar era.

Courtesy of Revs Institute, Peter Harholdt Photo

In 1961, Maserati needed a car to advance its success in sports car racing as its Type 60/61 "Birdcage" was aging. They fielded the first mid-engined V12 sports racing car, the Type 63. Briggs Cunningham's team of drivers, Augie Pabst and Dick Thompson, finished an impressive fourth at the 24 Hours of LeMans that year racing a Type 63. A trio of durable front-engined Ferraris swept the podium, but Enzo Ferrari could not help but observe the speed of the Type 63 Maserati.

The first mid-engined V12 Ferrari race car, the 250P, debuted at Monza in March of 1963, and the model was victorious at Le Mans, Sebring, and the Nürburgring that year, racing in the sports prototype category. Ferrari was dominant in the prototype category and the 250 GTO was winning in the GT class, but Ferrari needed an innovative car to replace the GTO. The answer was to put a roof on the 250P and plan to produce enough examples to homologate the car as a "street" car racing in the GT category. The first 250 LM (Le Mans), chassis 5149, made its debut at the Paris Auto Show in October 1963 and was subsequently displayed at the New York Auto Show.

Luigi Chinetti's North American Racing Team (N.A.R.T.) first raced a 250 LM at Daytona in February 1964, with Mexican Pedro Rodriguez behind the wheel. The car did not finish thanks to loss of oil and a loose fuel tank. The same car entered the Sebring race in March of that year, but it caught fire and burned. It was rebuilt, but later burned again in the early 1970s, so sadly, very little of the original car remains.

The 250 LM name indicates that each of the 12 cylinders displaces 250cc, but once 5149 was entered in its first race, it already had a 3.3 liter engine. All 250 LMs had 3.3 liters engines henceforth. The engine was rated at 360 bhp at 7500 rpm. The chassis was tubular steel with an aluminum skin. The car had an oil cooler and radiator in the nose, with the body tubing itself circulating those hot liquids back and forth to the engine.

(Continued on page 14)

1965 Ferrari 250 LM...continued

(Continued from page 13)

The driver's compartment was therefore not only cramped, but steamy. Wheelbase was 2400 mm, the same as the front engined GTO. Perhaps Enzo thought that he could argue with the FIA that the 250 LM was merely a modified 250 GTO! Ultimately, Ferrari failed in his attempt to have the 250 LM classified as a GT car and therefore he refused to race the car as a factory entry. The cars were sold to privateers, who entered them under their own teams.

Chassis 6217 that resides in the Revs Institute is one of the most original surviving examples of the model. This is owed to the fact that it was raced mostly in hill climbs by its first owner, Eduardo Lualdi-Gabardi.

Lualdi-Gabardi entered 14 hillclimbs with his new car in 1965, running no door-to-door races. He finished first overall in nine of those events, an impressive accomplishment. However, on the sixth of September 1965, Lualdi-Gabardi crashed number 6217 in practice for the Trofeo Lumezzane hillclimb. The nose of the car was damaged, and Lualdi-Gabardi sent the car to the coach builder Drogo for repair, and a longer, lower nose was installed. Drogo completed the repairs in time for the 1966 season.

Chassis 6217 with its Original Nose
Courtesy of Revs Institute

The repaired car won its class in the non-championship Coppa FISA at Monza in its season debut on March 24, 1966. He raced the car seven more times that spring, winning overall three times. In June he sold the car back to the Ferrari factory, to get in line for his next delectable Ferrari race car. While today we see the 250 LM as an object of beauty, and notable as Ferrari's first mid-engine car that could be street driven, in the summer of 1966 it was just last year's race car. Lualdi-Gabardi soon took delivery of the featherweight Ferrari 206 S, which weighed a scant 1,276 lbs compared with 1804 lbs for the 250 LM. The 206 had a 2 liter V6 that revved to 9000 rpm, and the car did not pretend in any way to be a "street" car.

As a racing model the 250 LM competed far and wide, although major victories were few since they were forced to run with the prototypes. However, the most famous 250 LM, and one of the most famous Ferraris ever, is chassis 5893. This car won the 1965 Le Mans 24 Hours outright after all the other faster prototypes were forced to retire.

(Continued on page 15)

1965 Ferrari 250 LM...continued

(Continued from page 14)

That car resides today in the Indianapolis Motor Speedway Museum. This is the last Ferrari to achieve overall victory in the Le Mans 24. We all know about Ford beating Ferrari in 1966 at Le Mans and Ferrari's failure to win Le Mans ever since.

Our subject car retired from racing in 1966 and Ferrari sold it to Michael McDonald in Canada. McDonald converted the car to street use. In 1970, the Gelles brothers from Chappaqua, NY bought the car and once again used it on the track, albeit lightly. Bill Gelles bought the car from Modena Sports Cars in New York City, and his test drive took place on the West Side Highway! Gelles was in the construction industry and a racer in the VSCCA, but later went on to become a partner in Wide World Ferrari in the New York suburbs. The dealership is still in business today. Chassis 6217 passed through collectors in Switzerland, Italy, New Zealand, and Germany before Mr. Collier purchased the car in 2005.

Courtesy of Revs Institute, Peter Harholdt Photo

So what is it like to drive a 250 LM? Swiss collector and vintage racer Pierre Mellinger drove chassis 6105 in contemporary vintage events such as Le Mans Classic and Tour Auto. In addition to being hot inside for the occupants, he notes that with two people on board "the main issue is the room in the footwell. There is room for driver's both feet, but room for only one foot of the passenger. The passengers other foot must rest on the sill, and it is very short and uncomfortable." Ferrari tried to pretend the 250 LM was a two passenger GT like the GTO, but it really wasn't.

Mellinger also noted the lack of ventilation in the car. Chassis 6105 was so hot inside he had his shop fabricate two small scoops in the hood to direct air into the cockpit. Otherwise there would be no ventilation, save for the partially opening side windows. The car is so loud that a headphone/intercom system is required to communicate with your passenger, according to Mellinger.

Mellinger continues; "But it is a fantastic car to drive even on the road because the ratio between power and weight is fantastic. There is around 340-360 horsepower and less than 950kg weight, so acceleration, braking, and handling are phenomenal. We really enjoyed it."

The 250 LM is Ferrari's first mid-engine "street" car. And yet 250 LMs competed successfully worldwide in amateur racing, and a 250 LM won the greatest sports car race of them all, the 24 Hours of LeMans in 1965. The design presaged all the well-known mid-engine Ferrari road cars such as the 206/246 Dino, the 365/512 BB, the 308/328, the Testarossa, and so on. Today Ferrari is most known for its mid-engine road cars, and the 250 LM started it all.

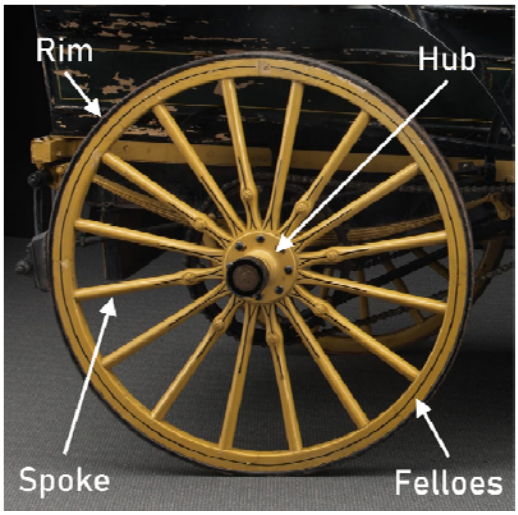
TAPPET TECH

Wheels,

Where would we be without them?

By Eric Jensen

Wheels have been around for centuries (pun intended). The earliest wheels were made from wood, of course. The person involved in the building of wheels became an established trade known as a wheelwright. The wooden spoke wheel design evolved over a few hundred years to become the mainstay of most road vehicles up to the 19th and into the 20th century.



A well-established industry existed to make wooden wheels that were easily configured to autos. The Panhard et Levasser wheel is a fine example of this application. The drive wheel is very similar to a carriage wheel of the time with the simple addition of a chain sprocket to receive power from the driveline. Wooden spokes, felloes, iron hubs and a steel rim were the components common to carriage wheels. The wooden spokes are tapered to fit tightly at the center with a peg carved on the outer ends to fit into the felloes. The steel rim is heated to expand it, the wheel spoke and felloes pressed in and the rim immediately cooled. A video on the manufacturing and assembly process can be seen here (click for the link). The earliest autos rode on the steel rim while later models fitted solid rubber and pneumatic rubber tires as seen on the 1912 Mercer Runabout (left).

Peter Harholdt Photos, Courtesy of Revs Institute,

A second type of wheel, the wire wheel, was invented in the early 1800s. The first wire wheels were called a "suspension wheel" with the steel wire spokes positioned radially from the center hub to a metal rim. Lighter than wooden wheels, the wire spoke wheel was adopted by bicycles, as seen on the Humber Penny-Farthing bicycle as een on the following page. The first car, Karl Benz's Patent-Motorwagen, was fitted with those wire spoke wheels.

(Continued on page 17)

TAPPET TECH

Wheels

...continued

(Continued from page 16)

Humber Bicycle with Radial Spokes

The radially spoked wheels were not, however, well suited to transmitting the power from a strong bicycle rider nor an automobile engine. The early radial design evolved into the tangential (or cross) spoke design familiar to most of our modern bicycles. By attaching the spokes in pairs across from each other, the torque from the rider or auto engine could be supported. A close inspection of the 1912 Hispano-Suiza T15 wheel (below) will reveal the cross-spoke design. Click here for a video of the build process. Yes, it is a motorcycle wheel, but the assembly method is common to bicycles and autos.

Peter Harholdt Photos, Courtesy of Revs Institute,

As we tell our guests when entering the Vitesse Gallery; Wire spoke wheels were more commonly used in Europe while the more robust wooden spoke wheels were more commonly used in North America.

As the 20th century progressed, the stamped steel disk wheel became more common and more fashionable on both sides of the Atlantic.

The 1927 Packard Prototype Speedster is the first auto with steels wheels in the Vitesse Gallery while the 1935 Bugatti Type 55 Super Sport is fitted with revolutionary cast aluminum wheels. The 1938 BMW 328 is fitted with steel wheels while the Alfa Romeo Tipo 8C 2900B Berlinetta is fitted with wire spoke wheels behind those wheel covers. In the Automobility Gallery, both the 1934 LaSalle and 1934 Chrysler Airflow are both fitted with steel disk wheels.

Wheels are a necessity and a style accessory to personalize your automobile. While wooden spoke wheels are no longer used, steel, aluminum and wire spoke wheels are all still used. Where would we be without them?

TAPPET TRIVIA

By Joe Ryan

And Now The Answers…..

Q: What race car was considered the first V8-powered car to race at the Indianapolis 500? *Answer:* The 1930 Oakland was the first V8 motor to compete at the Indianapolis 500!

This car was a "one-off." The motor was a 251 Cubic Inch flat head V8 Special, with dual 2-barrel carburetors. The motor made 80 HP. The car obtained a top speed of 105 mph and a qualifying speed of 95 mph. The number 38 Oakland had an average speed of 87 mph for the 500-mile race and achieved a respectable 13 mpg. The number 38 Oakland finished 11th and won $500.00.

The number 38 Oakland owner and builder was Mr. Ira Vail The car was driven by Indianapolis 500 rookie driver Claude Burton. Mr. George Howie was meant to be the driver of the number 38 Oakland. Mr. Howie was assigned the riding mechanic duty. Rookie Claude Burton was able to secure Perfect Circle Piston Rings as a sponsor, and therefore was named the driver. Mr. Burton made too many "rookie driving errors" and was replaced by the driving mechanic George Howie.

The original car no longer exists. A gentleman by the name of John Armstrong was able to obtain enough information to build a replica.

Oakland was the predecessor to General Motors Pontiac brand.

The Original

The Reproduction

Adopt-A-Car Program

Available Adopt-A-Car Automobiles and Engines

Alfa Romeo Guilietta
Alfa Romeo AutoDelta
Ardent Alligator
Bugatti Type 55 Super
Cadillac Series 61
Cisitalia SC
Cunningham C-3
Fiat Abarth TCR
Jorgensen Eagle
Maserati Tipo 60
Mercer Raceabout
Miller board track racer
OSCA Sports Racer
Porsche Elva
Porsche RS-61L Spyder
Scarab Sports-Racer
Simplex
Stutz Black Hawk
Vauxhall 30-98 Type OE
Waymo Firefly
Abarth 1000-TC-R engine
Alfa Romeo GTZ engine
C-6R Offenhauser engine
Cadillac OHV V-8 engine
Chrysler Hemi (C-3) engine
Duesy Sprint Car engine
Ford GT-40 Transaxle engine
Ford Turbocharged Indy
Gurney Eagle GP engine
Jaguar XK120 Series engine
Meyer-Drake Turbo Prototype
Porsche Type 901/20 engine
Porsche Type 901/22 engine
Porsche Type 908 engine
Porsche Type 916 engine
Columbia Three-Track
Humber 58" Ordinary Bicycle
Velocipede Bicycle

To adopt a car or engine, contact: Brian Lanoway, Adopt-A-Car Chair at blanoway@shaw.ca

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