The Hood Release

Oregon Region ♦ Classic Car Club of America

Summer 2012

"From the mountains to the prairies, to the oceans white with foam…"

1936 Brewster Town Car
Owner: Jon Gaddis

OREGON REGION
CLASSIC CAR CLUB OF AMERICA
Oregon Region
Board of Managers - 2012

Director	Rodger Eddy
Asst. Director	Jeremy Wilson
Secretary	Larry Cox
Treasurer	Howard Freedman
Membership Chair	Bob Earls
Members at Large	Quentin Robbins
	John Mitchell
Activities Director	Daryl Campbell
Publication Editor	Jeremy Wilson
Web Master	George Potter
Tour Director	Robert Douglas
Asst. Tour Director	Gene Bradshaw
Advertising	Howard Freedman
Club Historian	Mona Marsh
Club Librarian	Daryl Campbell
Sunshine Report	Evelyn Freedman

www.oregonccca.com

Editor
Please contact:
Jeremy Wilson
10035 NW Skyline Heights Drive
Portland, OR 97229
jeremywilson@popularrestorations.com

Moving?
Please be sure and advise your editor and/or membership chairman of the new address.

Sunshine Information
Please contact:
Evelyn Freedman
503-246-5667

The Classic Car Club of America is a non-profit organization chartered in the State of New York for the development, publication and interchange of technical, historical and other information for and among members and other persons who own or are interested in fine or unusual foreign or domestic motor cars built between and including the years 1925 through 1948, but including cars built before 1925 that are virtually identical to 1925 Full Classics® and distinguished for their respective fine design, high engineering standards and superior workmanship, and to promote social intercourse and fellowship among its members; and to maintain references upon and encourage the maintenance, restoration and preservation of all such Classic Cars.

The purposes for which a Region is chartered by the National Club are: The furthering of the ideas and ideals reflected by the By-Laws of the National Club in a specific regional area and to provide regional activities for the members in that area.

Classified Advertising
Classified advertising in *The Hood Release* and our web site is free to all CCCA members. All such advertising must relate to Full Classics® or Modified Classics® as defined by the CCCA.

Display Advertising
Display advertising is available on a prepaid basis. Please contact:
Howard Freedman
503-234-8617
Hfreedman@aol.com

Membership Information
Please contact:
Bob Earls
14104 SE Oatfield Road
Milwaukie, Oregon 97267
503-786-1606
corvairdude@comcast.net

Oregon Region CCCA 2012
Calendar of Events

July	**5**	Member dinner Meeting at O'Connor's 6:30pm*
	7	Pacific Northwest Region: Grand Classic at LeMay Museum in Tacoma*
	8	Collector Car Appreciation Day
	12-15	Sea-Tac Horseless Carriage Club "Red Carpet" Tour
	15	Forest Grove Concours
	20-22	Cascade Mountain Tour*
	28-29	Carlton Art in the Park
August	**2**	Member dinner Meeting at O'Connor's 6:30pm*
	5	Columbia River Concours
	19	Lake Oswego Car Show
	19	Cottage Grove Concours
September		No Board Meeting
	7-15	An Oregon Adventure the National CARavan*
October	**4**	Member dinner Meeting at O'Connor's 6:30pm*
	13	Pumpkin Tour with Packard Club
	27	Halloween Potluck at Evelyn and Howard's Shop*
November	**4**	Annual All Member Banquet*
	8	Board Meeting to plan 2013 calendar*
December	**9**	Annual Holiday Potluck at the Lake Oswego Heritage House*

* Denotes a CCCA or Oregon Region CCCA sanctioned event.

Director's Message

The intervening years between the founding of our Oregon Region and the present day have brought countless auto tours, social events, technical sessions, but most of all a camaraderie that approaches family closeness. I 'm honored to have been the first director and now again to serve in that position many years later.

The close friendships, the magnificent cars that we have seen or driven or owned must all be traced back to the inspiration that formed the Oregon Region of the Classic Car Club of America.

Although the charter application listed the required 25-signature application of national members, the impetus for a local region rests squarely on three men—Fred Koch, Richard Gross, and Ronald Trefry, the founders who worked hard to generate the interest that resulted in organizational meetings and a real club.

In this issue you will find an article focusing on one of the founders—Richard Gross. The other two are Fred Koch, long deceased as is his wife, Barbara; and Ron Trefry who will be chronicled in a later issue.

Rodger Eddy
Director, Oregon Region, Classic Car Club of America

Editor's Notes

I'd like to thank all of the members who submitted articles for the summer issue. They are *very* interesting and I hope you enjoy reading them as much as I did.

Please remember to update your Membership Directory with the page that was mailed out recently to correct Daryl Campbell's phone number. The correct number is 503-545-8224.

Note that two events have been added to our calendar (preceding page):

- The Sea-Tac Horseless Carriage Club "Red Carpet" tour. It's a "Wild Wild West Tour" to Winthrop. Contact Mike Smith at (425) 483-5545 or smith1909@frontier.com. Registration deadline is June 15th.

- The Cottage Grove Concours. The theme this year is "Celebrating Packards in Style". It is on the same day as the Lake Oswego Car Show. The entry form is at www.cottagegroveconcours.org.

Jeremy Wilson
Publications Editor

The Experience 2012

By Howard Freedman

Evelyn Freedman and Rodger Eddy

Here we are again back in Hickory Corner (Kalamazoo) Michigan for the annual CCCA Museum Experience.

Evelyn and I arrived here Sunday night, May 27 and got to work Monday morning doing a cleaning job on about 1,000 mascots that were given to the Museum by one of our members in the Detroit area, a number of years ago. The glass shelves were dusty and everything just needed a good clean up.

The Mascot Collection

Thanks to Bob and Frankie Douglas and Mona Marsh for putting little numbers on tags that we got from a wholesale jeweler supply in New Jersey, we were able to tag most of the mascots with numbers to coincide with a list that we received from our donor. so we can prepare a bound book to help visitors identify their interests.

It was 93 degrees outside on Monday and about 195% humidity so we stopped work about noon and drove over to Colon, Mi to see the Abbott Magic Company which was closed and so was the restaurant that was scheduled for lunch on the following Friday tour from the Museum through the country side. But at least it was cool in the car and the country is beautiful in this area.

Back to work on Tuesday and Wednesday finishing up with the help of our immediate past CCCA president Al Kroemer.

Thursday and Friday poured like a winter storm at the Oregon coast and I felt like we were going to be a total physical and financial washout for the weekend. But, our Grand Classic ® on Saturday was a total success with more than 50 premium Full Classics® on the field. Saturday night there was an awards banquet and while I prefer to hide under the carpet, had to speak about our plans for the conversion of the Museum into a world class facility with video kiosks, courtesy of David Charvet and his magic and digitizing thousands of pages of historic documents that will all be available on our museum web site. Seems like our plans got an excellent reception – we should have asked for contributions to make it happen but not the right time and place I guess.

Sunday was the Experience celebrating all foreign cars through 1965. There were some fabulous automobiles, as you might imagine and we had a special treat; our own Rodger Eddy came up from Auburn to go through the facility. He was thrilled with what he saw as were we. Seems Rodger has more pals and buddies that have known him for years from the Auburn Hotel. I had a tough time getting him to pay attention to everything we were showing him because of the interruptions from his many friends on the museum grounds.

Margaret Dunning in her Packard 1930 740 roadster

I also had the pleasure of seeing Margaret Dunning in her 1930 Packard, which she has owned since 1949. She has been in the national press numerous times recently and it's no wonder: At 102, she is an inspiration to us all.

Well, off to a Club board meeting for a day and a half and then home Tuesday night.

It is our wish that many of you will at some time be able to enjoy the many automotive treats at the CCCA Museum and the many other museum partners that share spaces on the grounds of the Gilmore Automobile Museum campus.

More on Our Modern Gas

By George Potter

From the *AERA Engine Builders Association Bulletin*

Valves Stuck in Guides from Old or Bad Gasoline on Start-up of Gasoline Engines

The AERA Technical Committee offers the following information regarding valves stuck in guides from old or bad gasoline on startup of gasoline engine. Whether it is an old car I truck I boat that was just sitting not being used for a time. It could be that you have just filled up the gas tank and in a short time your engine develops a miss. This could be from either old or bad gasoline.

As gasoline ages it begins to turn into varnish and forms a tar like gummy residue that can stick valves in the valve guides. Gasoline really only has a shelf life of about 4-6 weeks from refiner to your gas tank. Gasoline starts going bad in as little as two months when open to air but can take fifteen months. This information is just as important for your lawn mower gasoline as it is for the gasoline you use in your car. Quite quickly gasoline will loose some of the "light ends" (hydrocarbons that boil at ambient temperatures) be lost when open to the air or even a big tank which is half full of gasoline and half full of air. These "light ends" evaporate in the intake manifold during starting thereby providing vapors (the vapors are what burns) to the combustion chamber for ease of starting, Even more important is the loss these "light ends" can contribute to lost octane quality and reduced power, which can be detrimental to performance. And our out board motors, or yard power equipment blower can suffer from the same fate from old gasoline.

AERA receives calls from machine shops saying that the customer called the shop back saying my new engine has a miss. Only to find out that they have stuck intake or exhaust valves caused by a tar like gummy residue that seems like glue and is referred to as black slime. Customers are thinking the machine shop must have done something wrong because the valves stuck right after start-up which is not the case at all - just old or bad gasoline.

The interesting part is that this can happen not with just new rebuilt engines but our vintage iron too. The key is old or gas. From what AERA has determined, old gas can happen in as little as 6 weeks if left open to evaporation or up to 15 months if contained with little access to air. So if we take our cars out, drive them and fill with fresh fuel each season we are probable safe.

So this is not a definitive statement "you're going to have damage to your car engine" but a warning to take preventive action, lest it could happen. And engine tear down to fix stuck valves can be very expensive.
A better way is to use fuel stabilizer which is available at any parts store. It is supposed to keeps fuel from aging. My guess is that it prolongs the life of the fuel and well worth using.

Meet Richard Gross, an Inventor of Our Club

By Rodger Eddy

This article will focus on one of our founders—Richard Gross. The other two are Fred Koch, long deceased as is his wife, Barbara; and Ron Trefry who will be chronicled in a later issue.

Richard Gross' 1941 Packard 180 LeBaron sport brougham, parked on April 28, 1957 at Bound Brook Polo Club near White Plains, New York. CCCA had a meet there, but chewed up the grounds enough with a rally route that the club was not invited back.

Richard, who was 77 years old this April, was born in Brooklyn, New York, raised in the Bronx, and attended DeWitt Clinton high school, named for a former governor. That school was founded in 1890 on Manhattan Island, not far from what was a carriage building district and became auto row. The school was moved to northwest Bronx in 1929 with a campus layout, while the old building on 59th Street became an academy.

Richard's father had always said that Packard was the best car, so when Dad said it was time for Richard to buy a car in 1956, Richard scanned the New York Times classics and antique car section, which led to a 1941 Packard l80 LeBaron sport brougham in Scranton, Pennsylvania.

Only about 50 of that model were built. This one lacked the optional running boards, but had first-year-offered air conditioning (cost $200) although a part was missing. Richard was driven out in his friend's Jaguar to the Buick dealer who had taken it in on trade. The engine ran quietly, so Richard paid the $500 price, and drove it back to New Jersey over the old concrete-surfaced Route 46, where he felt every seam that joined the poured sections of roadway. New shock absorbers were indicated. A Chatham, New Jersey shop that specialized in classics installed shocks and repaired one of the hydraulic windows. Eventually, in about 1960, Richard sold the brougham to a Chicago charter member of CCCA, Edward Pohlmann who now lives in Florida. With gasoline prices rising to an ugly 25¢ a gallon, Richard promptly bought a new Volkswagen "bug" and a rusty 1940 LeBaron limo for parts.

Richard joined the CCCA in late 1956 with dues paid through 1957, attended a meet the first year and became active in what was known as the Headquarters region when the club had no actual chapters. Now it's the Metropolitan Region. Headquarters was in a Manhattan member's office at 122 Cedar Street. Before that HQ was in a member's Greenwich Village house at 97 Barrow Street—Margot Riebel who owned a Packard convertible. (Richard still remembers both addresses!)

Richard also recalls that radio and television comedian Herb Shriner was one of the first club members as a Packard enthusiast (Shriner died years later in a Studebaker Avanti accident). Shriner in 1952 sponsored a car show at the Grand Central Palace at 45th and Lexington, including the Packard Pan American concept car. Richard attended, and could have signed on as a charter member, but was still only a teenager. Shriner also had purchased in the thirties an Alexis de Sakhnoffsky-designed sport phaeton built by LeBaron in Bridgeport, Connecticut. de Sakhnoffsky had left his native Russia when Lenin took over. Richard also saw the Packard Daytona special and a one-off Packard coupe owned by singer James Melton who installed a Chrysler 300 engine for more power.

Richard bought his second classic in 1958—a 1937 Packard Model 1508 Brunn "cabriolet" town

car long wheelbase V-12—the only such body built in that model for 1937.

The car was purchased in New Jersey from Bill Steen who had acquired it from college students in 1955. The car was unique for its rear quarter windows and had a bustle trunk and rear-latching ("suicide") doors. The car was being stored in Richard Turnquist's garage (a pioneer CCCA member who died recently). The car's second owner had been the Pitcairn family (developer of the Autogyro, forerunner of the helicopter). The original owner's manual and a dealer coupon book for maintenance was still in the glove box. Turnquist handled the sale for Richard. Within six months Richard suffered three flat tires due to mismatched tubes.

Their mutual friend, Dick Downes, owned a Brunn-bodied Packard town car landaulet with open front, like one owned by racer Phil Hill. Downes had found the car in a Hyde Park, New York, estate garage, and owned several other vintage cars at his barn shop.

Meanwhile Richard was still using the 1941 Packard for everyday driving. But big cars required a big garage, and the nearest was five miles and two busses away. Richard obtained a commercial drivers license that then exempted him from otherwise mandatory insurance.

Richard sold this town car in 1960 to club member Wes Hartman, after driving it quite a bit. The car's original owner was a Philadelphia woman. Richard was the fifth owner.

In 1968 Richard purchased yet another Packard, a 1939 V-12 club sedan. Although the car was 85 percent restored and in primer, two oil lines to the filter were missing and had not been replaced by the time Richard decided to move to Portland, Oregon in 1972 after a visit here in 1970. Richard contemplated trailering the Packard to Portland, but instead sold it in 1970 to a club member in New Jersey. He bought a Cadillac Eisenhart-bodied hearse and moved west.

Richard had dropped CCCA membership for a period in the sixties and seventies, but in Portland he acquired a black 1947 Packard Clipper during 1979 and owned it for about four years (he recalls that the headliner seams ran from front to rear) but the car was "too modern" for Richard's classic tastes, and a Seattlite purchased it.

Richard has eyed researched, and examined a few Packards in intervening years, but without resulting ownership. Instead he drives a 1984 Mercedes station wagon, but the price of gasoline (now well above the once-high 25¢ per gallon) keeps his travels largely on TriMet buses. Richard favors German cars and Volvo now. He remembers that when he obtained his first driver's license in 1953, an Esso oil refinery less than 100 miles away in New Jersey sold gasoline there for 16¢ a gallon.

In 1966 Richard married New Jersey native Carol from Fort Lee, in Hudson County near the George Washington Bridge, Route 66, and Palisades Park. They met through their Jehovah's Witnesses church, and have two grown sons, Eric of Gresham, and Michael of West Linn. Carol's mother lived until 1997. Richard's mother died in 1960, and his father in 1986, pretty much ending the Gross connections to their roots in the East, except for Carol's two siblings.

Richard is a train and streetcar and racing boat buff as well as a lover of classic cars. He was interested in a career in railroading, but found that operations required 20/20 vision, ruling him out. He started driving buses in 1963 in New Jersey and New York, including charters, after having office jobs in import/export and in insurance that he disliked for their confinement indoors. He was a TriMet driver from 1973 until 1997 following his Oregon relocation. He retired when GPS gadgets and early/late interval point timing was being instituted for scheduling.

Richard fondly recalls the New York culture and vividly remembers a pre-marital date with Carol when they attended a Radio City show, had a Chinese dinner, visited Palisades amusement park, took a subway to midtown Manhattan, then the Staten Island Perry, and returned home on another Lexington Avenue subway as the sun was coming out.

After retirement, Richard and Carol took some coastal and Canadian trips in their Class C motor home, and later in their 25 foot Class A motor home to British Columbia. They also enjoyed an Alaskan cruise on the Holland-American line north to Glacier Bay.

Richard and Carol motor to Seattle a few times a year to follow his passion for boat watching at Elliott Bay and Lake Union where he attends a wooden boat festival. He enjoys boat watching on the Columbia, too, and is knowledgeable on America's cup sailing races.

Fred and Barbara Koch, now deceased, were instrumental in forming the Oregon region of the CCCA. Fred owned a 1936 Cord phaeton for many years, but was restoring it for many years rather than driving it.

Wait a minute folks! How did the Oregon Region start?

After his move to Portland, Richard attended swap meets and looked up local members of the COCA. He met George Choban, who then lived at what seemed "far out" northwest, as well as Steve Sauer, located in the opposite hinterland. But closer-in Fred Koch noted the preponderance of classics in the Seattle area and felt with Richard that a local group might form despite the fact that Seattle's "Northwest Region" then included Oregon. Fred knew Ron Trefry, and Diane Ocon who lived on Westover.

They decided to take an April swap space and Cliff Stranburg, with his Auburn Speedster, and Wayne Hinkelman, with a 1938 Packard Club Sedan, offered their cars on display at the booth in the area where the old Iivestock ring had been. Fred, Richard, and Diane manned the booth the first day, and Ron Trefry typed up a petition for the last day, Sunday, of the swap meet, for signing by those desiring a local region to form. The fall car show at the Expo found the locals sharing a space with the Seattle group, who were a bit concerned that their influence on the Northwest was eroding under the Portland activity. Signatures were required from local CCCA national members, and Trefry visited other locals to obtain the required 25 names. CCCA charter member, Sherman Williams in Portland, was listed in the national directory as a Michigan region member, so was temporarily overlooked.

Diane Brandon, then Diane Ocon when the resgion was being formed, lived on NW Westover after moving to Portland in 1973. She was active in the Northwest Region (Seattle area) and especially in the Rolls Royce club, since she owned all or part of five different models including a 1922 landaulet, a Shadow, and a Gurney-Nutting, and her driver was a 1957 Bentley that she drove 200,000 miles over 10 years. She helped Monte Shelton and Bob Ames with information on cars, and even assisted Al McEwan of Seattle with CARavans.

Diane edited the Rolls magazine Hose Clamps for 12 years, was director and a national director for the Rolls club, judged at Pebble Beach, wrote and writes Rolls descriptions for several auction companies and articles for the CCCA. She lives now in Tualatin.

Diane subsequently divorced, sold their Rolls Royce, moved, but wrote two Bentley articles for the CCCA within the past year or two. Her mother, Richard remembers, was into horses and has raced sulkies.

The petition was submitted, and the rest of the story will be told in a subsequent issue.

1936 Brewster Town Car Restoration

Part I

By Jon Gaddis

"I chauffeured numerous happy brides and grooms in it and the heart-shaped grill was always a big hit. But the car was getting tired, and I really wanted it to be a car that I could drive and be proud of at any event."

The Brewster Carriage Company was started in 1810 by James Brewster. The company quickly gained a reputation for fine carriages and by 1827, branches had been established in New Haven, Connecticut, Bridgeport, Connecticut and New York City, New York. The New York City branch was run by James' son Henry and ultimately became "BREWSTER & Co". In 1878, Brewster Carriage Company became the first and only American carriage builder ever to be awarded the coveted Gold Medal at the Paris Exposition. In 1883, Henry's son William joined the firm at the age of 17 and the slogan "Carriage Builder for the American Gentleman" was adopted.

In 1905, they built their first automobile, specializing in small well-designed formal cars for use on the crowded street of New York. By 1908, a variety of chassis were being used, including Rolls Royce. Their business had grown to the point that in 1910 they moved into a much larger facility in Long Island City. In 1914, they became sales agents for Rolls Royce, Ltd. Starting in 1915, they built complete automobiles known as the Brewster Knight. These cars were built until 1925 when the company was bought by Rolls Royce of America, which had been formed in 1919 in Springfield, Massachusetts. Brewster then became the primary body builder for Rolls Royce in the U.S. until 1931, when production of the Springfield Rolls Royce ceased. From 1931 until 1934, Rolls Royce Phantom II chassis were shipped directly to Brewster in Long Island City for bodies. Early in 1934 Rolls Royce of North America was dissolved. The Brewster building in Long Island City reverted back to the Brewster family.

Mr. J.S. Inskip, a faithful employee and now part owner of Brewster and Company, took over the operation of the company in an effort to save it from the ongoing effect of the Great Depression.

In 1934, Brewster, under the guiding hands of Mr. Inskip, purchased about 135 Ford chassis (the number of chassis bought is in some question and probably always will be). These chassis were stretched from a 112-inch wheelbase to a 127-inch wheelbase and a completely new body, especially the grill and fenders, designed by Mr. Inskip. Nearly the entire Ford running gear was utilized. The truly unique heart-shaped grill was the trademark of this new offering which sold for $3,500.00 in any of the four different body styles – town cars with an open chauffeur compartment, 5 and 7 passenger enclosed drive limousines, 4 and 5 passenger convertible sedans and a few 2 passenger roadsters. Town cars accounted for nearly two-thirds of the heart- shaped grill Brewsters built.

Unfortunately, by the summer of 1936, Brewster and Company was nearly at the end of their existence and on August 18, 1937, the company assets were sold at public auction. However, there were a few cars built by Mr. Inskip that carried the Brewster name after that time.

Credit for most of the above information goes to Don Weir of The Brewster Car Society, who is a great source of all things Brewster!

As a boy I helped Everett Holmes and Don Letson with some of their respective Full Classic car restoration projects in North Portland and became fascinated with the elegant cars of the classic era. As an adult I finally decided on a unique Full Classic, a Brewster Town Car limousine. They are unique because the body is coach-built and the chassis is Ford-built. So I began my quest to find a good

Brewster. I first looked at one in Atlanta, Georgia then in Delano, Minnesota, then somewhere in the beautiful countryside outside of Pittsburgh, Pennsylvania. They all had their issues – the one in Delano, Minnesota's issue was it sold at auction for $126,500.00! Finally I found our car in San Francisco, California and my wife was happy because she said "you are spending a lot of money not buying a car."

Our Brewster was originally owned by Elizabeth S. Proctor of 630 Park Avenue, New York City, New York. Mrs. Proctor took delivery on June 3, 1936 – we have the Brewster Company production card for it. It has had an uncertain number of owners and we have had it since 2005.

It draws a lot of attention wherever it is. People invariably ask about the "heart-shaped grill" – is it original? Many people have never seen an open front "town car" limousine. The rear passenger compartment has vanity mirrors on either side, a buzzer to alert the chauffeur on the right rear armrest, a privacy blind on the rear window and, of course, division glass.

We enjoyed the car the way it was, basically original with an old repaint and a mostly original interior. I chauffeured numerous happy brides and grooms in it and the heart-shaped grill was always a big hit. But the car was getting tired, and I really wanted it to be a car that I could drive and be proud of at any event. So we are embarking on the body-off the chassis full restoration as of April 14, 2012. If there is enough interest in the project, I will submit "progress reports" in upcoming *Hood Release* publications.

Please Welcome Peter and Karen Dahlquist

Karen & I were born and raised on Kansas farms, mine a western Kansas wheat farm and she on a central Kansas truck farm. We met at Kansas State after I returned from the service. Married in 1963, moved to Portland in 1966. Karen is a physical therapist. I started selling farm machinery. My job moved me to Walla Walla in 1967. Karen can get a job anywhere just by stating she is a therapist and available. Two children were bom, a boy, Timothy, in 1968 and a girl, Kristen, in 1974. In 1977 a friend and I bought a garbage business, which developed into a small business outside of Walla Walla. We sold out in 2008 and retired.

"Casper" and "The Yellow Peril"

Our auto stable is varied, a 1953 Studebaker ¾ ton pickup which was purchased new on the farm in 1954, a 1964 VW Karmann Ghia convertible, which was our first new car, a 1932 Model 18 Ford Phaeton, a 1940 Lincoln 3W coupe, (LCOC Primary), 1942 Continental Cabriolet (CCCA Premier), 1946 Lincoln Continental Cabriolet (CCCA Senior) and a 1971 VW Karmann Ghia convertible. Then there is the 1944 Ford 2N tractor and the 1948 8N tractor, which is in the process of getting a 100 horse V8 engine. (Just for fun)

The Oregon Region CCCA and Packards of Oregon Go Hollywood!

By Robert Douglas

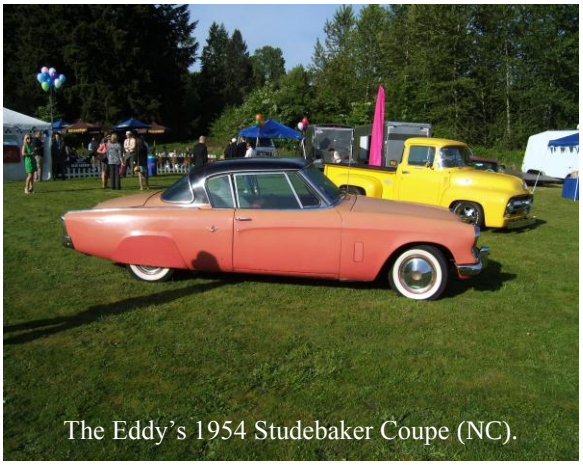
The seventh and eighth of May 2012 found the Oregon Region of the Classic Car Club of America and Packards of Oregon in all new territory: television. Mr. David Norris, the on camera vehicle coordinator for TNT'S drama series "Leverage", contacted both clubs to see if there was interest from the members in displaying their cars for an up coming episode, entitled "The Real Fake Car Job".

"Leverage" follows the adventures of a highly skilled team out to settle scores against those who use power and wealth to victimize others. The show stars Academy Award Winner® Timothy Hutton, Gina Bellman, Aldis Hodge, Beth Riesgraf, and Christian Kane.

For displaying our cars there was a very nice donation to both clubs treasuries, always much appreciated. Dave McCready's 1934 Packard 1101 Coupe Roadster, Dietrich, became one of the centerpieces for the episode. The other club member's cars were on display at a small concourse where much of the action for the episode takes place. The Sah-Hah-Lee Golf Course in Clackamas, Oregon was the setting for the event and both the setting and the weather were excellent, a rare occurrence for Oregon in the spring.

Little did we know that when we arrived on Monday at mid day with the cars that the event would be run with the smooth precision of a military operation. The crew was courteous,

The Douglas' 1938 Packard Eight (NC) and the Freedman's 1937 Cadillac Coupe (NC).



The Eddy's 1954 Studebaker Coupe (NC).

The Mitchell's 1929 Packard Dual Windshield Touring Car.

Monte Glud prepares he and Elaine's 1936 Packard Convertible Sedan (NC).

Mona Marsh's 1941 Cadillac 62 V 8 Coupe with the Freedman's 1959 Thunderbird (NC).

Part of the camera crew next to the Hackney's Nash Healy (NC) working out a possible shot.

The Cataldo's 1956 Packard 400 (NC)

The Freedman's 1941 Packard 180 on the field.

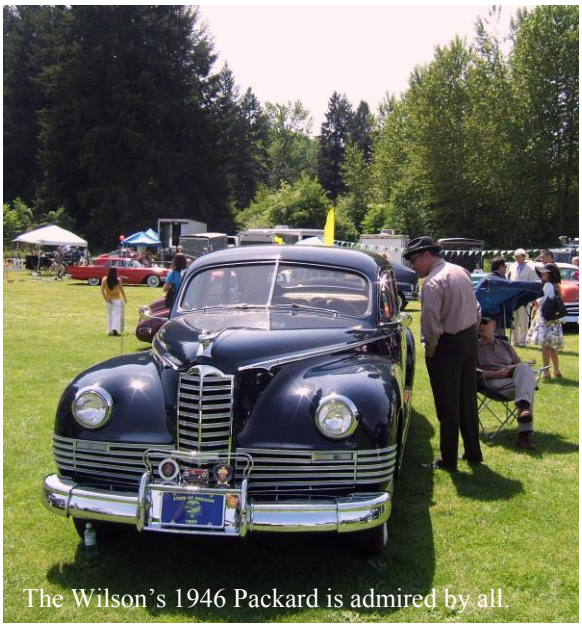
friendly and very glad to see us, both the cars and the owners were treated with the utmost respect by everyone on the staff. They got the cars onto the field and arranged in short order, answered all our questions and told us what they wanted us to do.

The Douglas' 1935 Auburn Speedster by Glenn Pray (NC).

The cars were to be left over night at the golf course because filming was to start early the next morning. At first your reporter was apprehensive about leaving our Glenn Pray Auburn Speedster (NC) and 1938 Packard Eight (NC) over night but with the production company providing armed security 24/7 for the cars and camera equipment as well as all the other cars on the field I relaxed and said, OK!


The Hackney's 1948 Packard Sedan (NC).

The other members and their cars were as follows: Lisa and Bob Earls took several of the Freedman's cars, the 1941 Packard 180, the 1937 Cadillac Opera Coupe (NC), the 1963 Corvair (NC), the 1951 Studebaker Land Cruiser (NC) and the 1959 Thunderbird (NC), Georgia and John Mitchell brought their newly acquired 1929 Packard Dual Windshield Touring Car, Mona Marsh brought her 1941 Cadillac V8 62 Coupe, Rodger Eddy brought he and Jan's 1954 Studebaker Hawk (NC), Jeremy Wilson brought he and Victoria's 1946 Packard 8, 2126 7 Passenger Custom Super Clipper, Matt and Karla Hackney provided their 1949 Packard 200 Deluxe Sedan (NC), as well as their Nash Healey (NC), Monte Glud drove he and Elaine's 1936 Packard 1280 120B Convertible Sedan (NC), Dave McCready not only had his 1934 Packard in the film but on the field he had his 1951 Chevrolet Coupe (NC) and Chris Cataldo provided he and Yoshiko's 1956 Packard 400 2 Door Hardtop (NC).


The Wilson's 1946 Packard is admired by all.

All in all this was a good showing for both the Packard Club and the Oregon Region Classic Car Club of America. There were also a few other cars there from two other clubs to round out the field.

A movie camera awaits the next scene.

The following morning everyone had to be on the set at 6:30am and again the shoot took off like a well-oiled machine. There was a last minute rearrangement of the cars by both the Director and David Norris with Bob Earls, Matt Hackney and your reporter moving the cars. There was also a meeting for all those that were going to be extras making up the Concours crowd. Everyone's wardrobe was checked for propriety (we all passed with flying colors) and we went to work. Not only were the car owners on the field but about a hundred to a hundred and fifty other professional extras. It made for a very convincing Concours show.

All of us were marked into three or four positions and coached on how to "silent talk" as the voices all would be dubbed in later. Then it was time for rehearsal, each scene was run through three to four times then three to four takes with the actors and extras all going through their paces. It was a great way to spend a fun but long day; we did not finish until seven o'clock that evening! It was great fun though, the crew made sure we had plenty of water and fresh fruit, there was a great catered lunch and all the transportation was in air conditioned super van busses. The lunch was served in the sound stage area where we got to see some of the indoor sets and believe me they were fantastic! The sets brought a whole new meaning to the term *trompe l'oeil* (fool the eye).

The film crew sets up a shot around the Wilson's 1946 Packard Super Clipper.

When we were not busy being extras it was very interesting to watch the crew, the actors and director set up scenes, lighting and various camera angles to provide the seamless visual flow of images that we have all come to take for granted on our television screens. There was one scene that I found fascinating; two of the main characters were walking beside the speedster and the camera that was following them was on a boom, which moved from behind the car, out over and around the hood ornament gliding within a foot or so of the car all the way around the front and part way down the other side following the characters. At first I was very nervous but the skill of the crew put me at ease and I watched them perform this move about five or six times getting just the right take.

As I stated at the beginning this was all new territory for many of us but it was a fun and enjoyable event for all that were there. Both the Oregon Region Classic Car Club of America and Packards of Oregon were, in the immortal words of Norma Desmond, "Ready for our close up Mr. DeMille." David Norris, the cast and crew made us all feel welcome and we wish them well in the upcoming season of "Leverage". We are looking forward to seeing "The Real Fake Car Job" when it comes on the air!

For more information about Leverage, check out these websites:

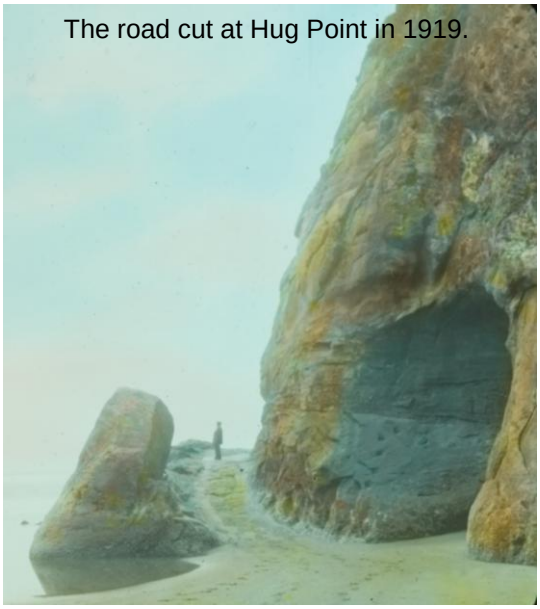
www.tntdrama.com/leverage

www.leveragefans.com

Roosevelt Military Highway #9 to the Oregon Coast Highway, US 101

By Robert Douglas

In the early days, the Oregon Coast was a very isolated area mainly accessed by ship, a few railroad lines and seasonal mud tracks. Before 1921 the only North, South roads to exist on the Oregon Coast were a mud, timber and plank road from Tillamook to Astoria in the North and in the South the 1872 Coos Bay Wagon Road connected Roseburg, Dora, Sitkum, Coos Bay and Crescent City. On the central coast there was one road, it went from Newport to Toledo, Eddyville, Blodget and Corvallis. These roads were mainly dirt with some planking and were hard going at best. In 1913 Oregon's Governor, Oswald West drafted a bill setting aside the Oregon beaches between the high and low tide lines as public property and not subject to commercial development. This bill gave Oregon the beautiful and scenic coast that we now enjoy with out private landowners being able to block off the beach to public access. The other reason that he drafted this bill was so that the beach could be used as a transportation corridor at low tide, after all there was no highway up and down the coast. One of the best places to see the



The road cut at Hug Point in 1919.

remnants of what you might call The Oregon Beach Highway is south of Cannon Beach at Hug Point State Park where you can still see the remains of a rock cut that allowed wagons and then cars to travel around the point at low tide on their coastal journey.

"Tourist One", the first Ferry on the Astoria to Megler crossing of the Columbia River in the early twenties.

The central coast was opened up, though mainly by ships, during WWI to exploit the reserves of spruce timber and lumber, which were needed to build airplanes for the Great War.

In 1919 however things began to change for in 1916 a young man came to Oregon from Iowa and went to work at OSU and became head of the Engineering Department. In 1919 this young man was offered the position of State Bridge Engineer for the Oregon State Highway Commission, his name, Conde Balcom McCullough. Another event happened at this time that began to set things in motion, Oregon became the first state in the Union to enact a gasoline tax of 1 cent per gallon and secured matching federal funding for the building of roads.

Traveling the Oregon Coast in September of 1914.

In 1921 work began on the Roosevelt Military Highway #9 which we now know as, The Oregon Coast Highway, US 101. The work started with the securing of right away along the coast. For the most part the work started in the north and proceeded south because of the proximity of the Columbia Gorge Highway, the first paved major road in the northwest. The first bridge to be built was the Young's Bay Bridge in 1921 and then the Lewis and Clark River Bridge. With these two bridges automobiles gained convenient access to the

A Corduroy Road on the coast in 1917, at least you were out of the mud when it rained.

resorts on the North Oregon Coast. The next bridges to come were Depot Bay, Rocky Creek and Soapstone Creek completed by 1927. Next it was on to Tillamook County and the Wilson River Bridge, then on to Lane County with the Tenmile Creek Bridge and the Big Creek Bridge all completed in 1931. Later in 1931 and in 1932 the Cape Creek Bridge and tunnel at Heceta Beach and Heceta Head Light House were completed. Virtually all of the bridges that were built along the coast replaced ferry's that crossed all of the various major rivers and bays, just imagine how long it would take to travel

South bound on an early timber bridge over Moolach Creek near Lincoln City in the twenties.

Looking south on a plank road south of Cannon Beach in the early twenties. Like the Corduroy Road it got you up out of the mud when it rained and it provided a lot smoother ride.

down the coast if you had to stop and wait for a ferry at every big river or bay!

The other event that took place at this time, happened in Salem, on 27 February 1931, with the passage and recording of HB 262 with the Secretary of State, the Roosevelt Military

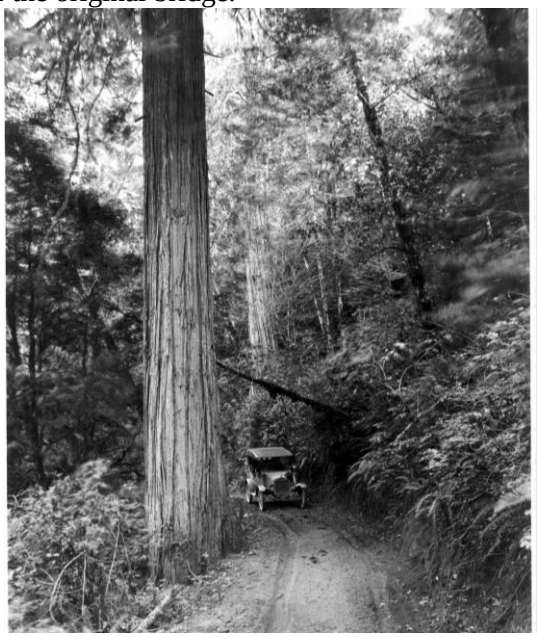
Highway #9 was renamed "The Oregon Coast Highway".

Crossing the Rogue River in 1926 on the Wedderburn Ferry.

Early construction on the Oregon Coast Highway near Arch Cape.

The bridge construction shifted to the south and in December of 1931 the Isaac Lee Patterson Bridge crossing the Rouge River at Gold Beach was opened to traffic. This bridge was the first use of pre stressed concrete in bridge construction. Between 1932 and 1936 the five Art Deco Masterpieces that we associate most often with McCullough were completed, The Yaquina Bay Bridge, the Alsea Bay Bridge at Waldport, the Siulslaw River Bridge at Florence, the Reedsport Bridge over the Umpqua River and the North Bend Coos Bay Bridge over Coos Bay which in 1947 was renamed The McCullough Bridge in honor of the designer of all these beautiful bridges, Conde B. McCullough, for the Coos Bay Bridge was McCullough's favorite.

In all there were 160 bridges down the Oregon Coast that he had a hand in designing which made travel more convenient and a year round possibility. In all this time there has been only one of his major bridges that needed to be replaced and that is the Alsea Bay Bridge at Waldport in 1991 as the salt water used to mix the concrete was destroying the steel reinforcing of the original bridge.



Traveling north toward Port Orford in 1920 on the Roosevelt Military Highway #9.

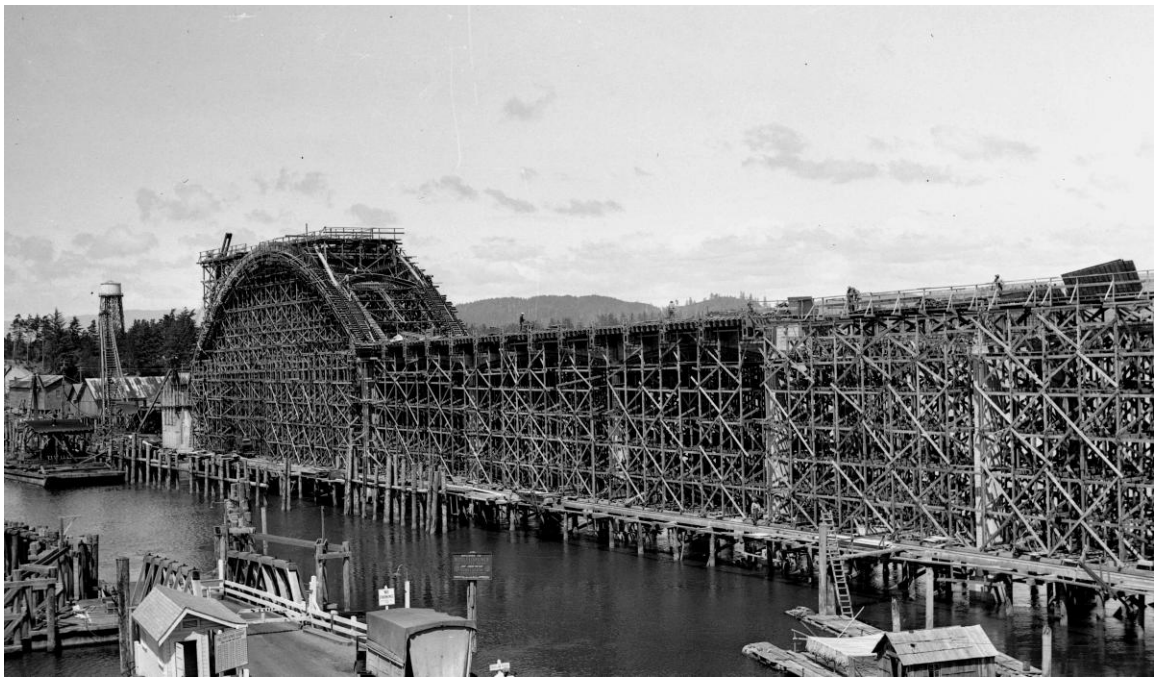
Driving south from Port Orford toward Humbug Mountain in 1920.

Climbing up Humbug Mountain heading south in 1920. It was a long drive to Gold Beach!

Big timber is marching across the bay, the Alsea Bay Bridge under construction in 1935.

A wayward Ford construction truck is being fished out of Alsea Bay.

You are looking at the first timber bridge over Alsea Bay in the late twenties.



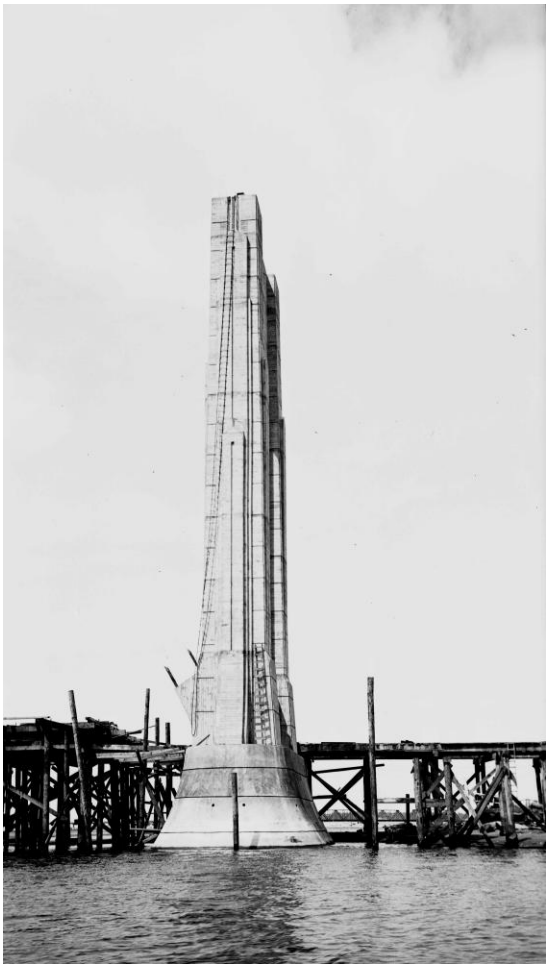
The Siuslaw River Bridge near Florence, Oregon under construction in the mid thirties.

One of the four Bridge Towers under is construction.

Wood forms for pouring concrete starting over the Siuslaw River.

You are looking at the initial piling going in for the bridge over Coos Bay at North Bend in 1935.

The first stanchion of the bridge over Coos Bay is being completed.



The first stanchion is complete and stripped of forms, now the work begins.

Traveling the Oregon Coast Highway south of Reedsport in the 1920's.

The Umpqua River Bridge under construction near Reedsport, Oregon in 1935.

There is a quote from Conde B. McCullough that seems appropriate at this point: "If we engineers had souls, which I doubt, we might have to take the back roads to keep from blushing every time we see some of the things we have done. But on the other hand, I'm kina human like the rest of humanity and I'll admit that there's at least one or two bridges I've had a hand in and when I look at them, I kina figure I'll have some alibi when I see Saint Pete. Not all of 'em you understand, but some of 'em did come out so good they make life worth living."

This gives you a brief over view in words and pictures of the evolution of Oregon's US 101 from what it was like to travel on the Oregon Coast before all the bridges and the making of Oregon's portion of US 101. For travel on the Oregon Coast even up into the late fifties and early sixties was no walk in the park. I have friends who lived in Coquille and going to see their grandparents in Gold Beach was an all day drive, even in the early to mid fifties. For even though US 101 by that time was a year round paved road the route was, at best, circuitous.

There is a book that you might find of interest if you, like me, would like to know more about the history of The Oregon Coast Highway: "Lifting Oregon Out of the Mud: Building the Oregon Coast Highway" by Oregon author, Joe R. Blakely

I would also like to thank the ODOT Archivist Ms. Patricia Solomon for all of her help in acquiring these images from their Archive in Salem, Oregon.

In conclusion the next time you travel on "The Oregon Coast Highway" remember to look and enjoy it carefully, for you are traveling through history and riding on the shoulders of all those that toiled so hard to make your journey a smooth one. If you run into construction or there is some gravel on the road just remember what the trip was like for those that traveled this road before.

Ten Commandments for the Car Collector

By Donald Peterson
Car Collector Magazine February 1979

1. Thou shalt not read thy Hemmings on company time, lest thy employer make it impossible to continue thy car payments.

2. Thou shalt not covet thy neighbor's car nor his garage, nor his battery charger.

3. Thou shalt not store thy car out-of-doors except for the wife's Toyota.

4. Thou shalt not deceive thy wife into thinking that thee is taking her for a romantic Sunday drive when indeed thou art going out to look at another car.

5. Thou shalt not love thy cars more than thy wife and children.

6. Thou shalt not despise thy neighbor's Edsel, nor his DeSoto, nor even his '47 Plymouth.

7. Thou shalt not tell thy spouse the entire cost of thy latest restoration, at least not all at the same time.

8. Thou shalt not promise thy wife a new addition for the house and then use it to store cars.

9. Thou shalt not allow thy sons and daughters to get married during the car show season.

10. Thou shalt not buy thy wife a floor jack for Christmas.

Spaceship Landing Changed the Life of an Octogenarian

By Rodger Eddy

A prerequisite of being old…is that you remember and experienced things that those younger just can't match. Now, please don't think that I dwell on being old, because I try not to think like that. But…

I often think of my father, born in the early 1890s, who saw technology and travel change from a horse and buggy on a dirt road to jet aircraft flying safely at hundreds of miles an hour.

The 1937 Studebaker Dictator carried us safely and swiftly in 1937, a mere 25 years after
cars even showed up in Oregon. Seventy-five years later automobiles are much advanced, but our classic-era vehicles still compare very favorably today.

When I was still in grade school, the brothers of two of my classmates had the foresight and the taste to buy and drive not the Model A Fords that most kids drove, but classics like 1937 Cords and 1932 Chrysler convertibles! My first classic car ride was courtesy of classmate Gilbert Meigs in high school, driving his brother Richard's early 1930s Chrysler roadster with an overdrive that allowed clutchless shifting. A couple of years later at the University of Oregon, Richard was still driving a classic Cadillac when the early postwar years found virtually no market for classic-era cars which were mostly driven only if one couldn't afford a real car.

I was by then driving my folks' old '37 Dictator, but coveted a convertible. Following my fourth of five years in college I decided it was time for me to invest In a $500 or so older convertible, I tried out several advertised, including a 1940 Oldsmobile, a 1937 Packard, a 1939 Studebaker, a 1935 Ford, and a 1937 Cord with a customized body and Cadillac engine that had the most appeal. But just then my parents returned from a trip to Los Angeles with a Times newspaper for their journalism-student son. In the classified section was a 1936 Cord phaeton, and I became the owner.

In those years (1951) there was no network to facilitate locating parts, owners, or literature, and one had to seek sources and make new friends. Motor Trend magazine was one of few contacts for old car information, and Bob Gottlieb's monthly columns about "big old cars" and a short classified column was most valuable. A tiny ad seeking Cord, Auburn, and Duesenberg fans invited inquiries in 1952, and I became a charter member.

Driving a 15-year-old car in that era was unheard of unless you were very poor, out-of-touch with society, or eccentric enough to admire old cars. Perhaps I was all three. I can remember driving my 1936 Cord from Portland to Eugene and back, and never seeing an older car still on the road.

In the early fifties when I worked for the Gresham Outlook newspaper, there was a car lot that featured classics on Stark Street at 158th and some of my contemporaries in the hobby remember it still. Frank Flora was the proprietor, and I liked an L-29 Cord sedan he had, and a 1940 Lincoln coupe. Somehow I met Pat Cosgrove from Seaside who drove a Cord sedan, and when he showed up on Main Street in

Mrs. Alan H. Leamy, widow of her renowned designer husband and honorary member of the ACD Club, visited in the lobby of the Auburn Hotel during one of her visits to the reunion during the seventies.

Gresham one day and parked behind my phaeton, we created a sensation. The news editor wrote a column comparing us to Lemmings, and the column was reprinted in the Auburn-Cord-Duesenberg Club Newsletter.

My first visit to the ACD club annual reunion was in 1959, where I was impressed to meet Gordon Buehrig, the man who had actually designed my car. It was likewise a thrill to meet other club
members who had been only names until then—Bill Kinsman who did the newsletter, Ray Wolff who was the country's most knowledgeable Duesenberg expert and was driving his Graber-bodied convertible, and Dick Green who arranged my first ride in an L-29 Cord. And what a thrill to see seven or eight Cords lined up on the courthouse square.

I could not return to Auburn until 1976, but then I met Herb Newport, designer of Duesenbergs, in the Auburn Hotel lobby. He and his friend Dave Henderson from Virginia completed the most touching story I have come across in the car collecting world.

Herb and Dave visited the widow of Al Leamy (Auburn designer extraordinaire) in her New Jersey home, and were graciously presented with a series of colored and hand-drawn automotive renderings by her husband who had died at a young age nearly 40 years earlier. These pictures had been treasured and hidden away by his devoted widow who believed they had value only to her. The drawings were subsequently donated to the museum, reproduced, and are sold today. Mrs. Leamy was brought to an Auburn reunion by Herb and Dave, was made an honorary member of the club, and could not

have been more moved to learn that her beloved Alan was honored still in the automotive world and was now receiving fully the recognition and respect that eluded him until classic cars found their place in history.

For many years I spoke with and listened to Gordon Buehrig present seminars and historic recollections at the Auburn annual reunions, and he also was forever and vociferously grateful to the club and to the hobby for making him a nationally recognized personality. His widow, also a club member, died only this year, after attending almost every club reunion at Auburn.

Other vivid memories are of Alex Tremulis recalling on Ninth Street in front of the Auburn Hotel about how he was called upon to tweak the Cord design while still a youth working for Mr. Cord, and how he added the external chrome exhaust pipes; and later designed the Tucker.

After that first meet in 1959, I needed a ride to the Fort Wayne airport. A young man named Glenn Pray graciously offered, and I rode as he drove his immaculate black Cord Phaeton and we discussed his intention to buy the ACD Company and move it to Broken Arrow, Oklahoma.

And there are the many Duesenberg owners who accumulated during the annual festival in the Presidential Suite, so named and established by Ray Wolff, historian, and Joe Kaufman, world's best Duesenberg restorer.

Don Carr, who always stayed at the hotel, gave my young son and wife their first Duesenberg rides in the speedster that became the museum's first Duesey donation.

Club president Doug Johnson drove every year in his 1936 Cord phaeton to the hotel, and always came early because he loved the hotel and watching Auburn transform from a lazy Midwestern town into the world capital of auto enthusiasts. The club reunion became Indiana's best attended event behind the state fair and the Indy 500 (world's largest paid admission attended event).

That first brief glimpse of a spaceship parked on SW Broadway in 1938 (which my smart brother identified for me as a Cord) turned into a life-changing experience for and eight-year old boy.

Strawberry Social 2012

By Victoria Wilson

The Club's annual Strawberry Social and Tour got the summer off to a memorable and delicious start. Gathering at Ft. Vancouver's Officers' Row, more than a dozen (mostly collector) cars—and their proud owners—sipped hot coffee, nibbled fresh muffins, and greeted each other under promising blue skies.

Coordinated by Bob and Frankie Douglas and Gene and Lois Lane Bradshaw, the tour's final destination lay 26.5 miles ahead to a farm in La Center, Washington.

Owned by Lois' nephew Jerry Lane and wife Dian, the farm (and its spectacular "barn") provided our lucky group with an unforgettable and unique setting in which to enjoy the beauty of the day.

The touring cars departed Ft. Vancouver, heading west and north through old town Vancouver, cruising along grassy meadows and within view of the water, toward Ridgefield. Old town Ridgefield is picturesque, quaint and colorful, and the touring cars garnered many expressions of awe and delight while driving through.

Robert Douglas, Matt Hackney, Larry Cox, and Jerry Lane

I still firmly believe that driving these old beauties, getting them out where others can see and appreciate them, is the best way to keep the Club—and the cars themselves—alive and well. Seeing the grand and impressive vehicles in a show is one thing; experiencing them actually out on the roads is another. I've always been tickled at the response of total strangers to these magnificent automobiles as they pass by on the highway or down a neighborhood street; the fun for me has never dulled. Smiling and waving back at appreciative and enthusiastic people is not only fun for a collector car's owner, it draws the observers in. Hopefully a seed is planted that one day grows into a desire to promote the preservation and continued use of these vehicles—and perhaps even experience ownership one day.

We continued north through the Ridgefield National Wildlife Refuge, a lovely drive that eventually wound us upward through Allen Canyon, past the 1895 Allen homestead and agricultural area. The stately old maples and cedars stood in sharp contrast to the blue skies and fantastic white cloud formations—clouds without rain!

Driving through La Center we continued to our destination, the Lane's new barn—designed and (mostly) built by Jerry himself over a 5-year period. Many of the huge timbers used in framing the structure Jerry hand-felled on the property, which boasts grand and sweeping views to the south and west. The barn's bright main room and large, airy kitchen provided the ideal atmosphere in which to enjoy a picnic lunch, conversation and laughter, and of course—strawberries!

Bob Douglas and Matt Hackney served up generous portions of mouthwatering strawberries, slathered over homemade shortcake and covered with plenty of vanilla ice cream. **Kudos and many thanks to the event coordinators; to our terrific club cooks, and especially to the Lane family**. Gracious hosts each, they ensured an enjoyable, comfortable and relaxed social event for all. We could not have had a more beautiful setting—inside and out—than that which we enjoyed on Sunday, June 24th. From the weather to the tour route, the hospitality to the venue to the food, everything came together for an outstanding day—summer doesn't get any better!

Coach Building Terminology

This article was recommended by Bob Earls and has been reprinted with permission from Coachbuilt.com, an online encyclopedia of American coachbuilders and coachbuilding with over 1200 auto body builders represented. It is also the recipient of the Society of Automotive Historians' E. P. Ingersoll Award for the best presentation of automotive history in other than print media (2010).

Automotive body designers often used traditional coachbuilding terms to describe new designs. As automotive styling diverged from traditional coach styles, these terms were often applied imaginatively. Designers took creative liberties with terms which could be contradictory from make to make as did sales managers attempting to create an aura of, for example, sportiness. Terms such as "sedanca" and "deVille" have been applied so broadly to so many different body styles as to render them almost meaningless for exact descriptive purposes.

Abbreviations: **Br.**- British; **De.** - German; **Fr.** - French; **It.** -Italian

AGASOTE - a fire-resistant high-density fibre-board panel originally developed for use in rail cars for ceilings and compartment linings. In the early teens it became a popular automotive roofing material and was sometimes used to line commercial van and ambulance bodies. Agasote was a product of the Agasote Millboard Company of West Trenton, New Jersey. - see HOMASOTE

ANTIQUE - a general description of any car that is 25 years old or more. All Full Classics™ are antiques, but not all antiques are Full Classics™ as defined by the club.

ALL WEATHER or ALLWEATHER or ALL WEATHER TRANSFORMABLE (Br.) - a term used in the twenties and rarely in the thirties for a Cabriolet. In England it can denote a four door CONVERTIBLE SEDAN. Some early examples were built using the Baehr patent - see BAEHR PATENT.

ANTIQUE - most states and many multi marque auto Clubs consider any vehicle that is at least 25 years old to be an "antique." Purists would argue that the term refers to vehicles made no later than 1915.

"A" PILLARS - the windshield posts or forward most of the roof supports

ARESMA - a German brand of cloth top material that was fairly popular prior to the mid-1980's and remains in production

ARTIFICIAL LEATHER - a surface coated fabric used for top material, upholstery or for auto interior trim. Generally these were pyroxylin coated fabrics. The term was pretty much obsolete after 1950, but during later years of use, was cleverly modified to "art leather".

ARTILLERY WHEEL - this was the standard wheel type on early cars in which the rim was attached to the hub with thick hard-wood spokes, generally numbering 12

ART MODERNE [aka ART DECO] - from Paris' 1925 International Exhibition of Modern Industrial and Decorative Arts was born what we know as Art moderne. At 1929's NY Salon Fleetwood exhibited an art moderne Cadillac of sable and polished metal, with damascened hood, polished aluminum moldings around its windows, as well as chrome-plated lamps, windshield frame, wheel spokes and trunk rack. The interior featured a figured rayon fabric on seats and armrests, piped with silver leather. 2 opera seats were fitted in the ornate division that was inlaid with 22 kinds of polished hardwoods in a modern design; hardware was 2-tone color-plated. In 1933 Cadillac exhibited a new art moderne car, its aerodynamic coupe on the V16 chassis, in the Hall of Travel for the Chicago World Fair "A Century of Progress". Also at the 1933 Worlds Fair were the "Twenty-Grand" Rollston-bodied Duesenberg, Packard's Dietrich-bodied "Car of the Dome" - featuring the all-metal roof - and Pierce-Arrow's "Silver Arrow" designed by Philip Wright.

ARTZ PRESS - a press used to form metal cowls for custom bodies. Designed by J.D. Artz of the Dayton Folding Tonneau Company in the early 1920s.

ASSIST STRAPS - standard equipment on enclosed coachbuilt cars, they assist the rear seat passenger when exiting the vehicle. Typically a twisted braided cord with a large pom-pom or finial on the end. Some where made of a looped strap made from leather, sometimes covered with fabric or coach lace. They were located to the rear of the back door openings on the post between the door and the rear quarter window. Later vehicles featured vertical grab handles in place of the assist straps.

AUTOPHONE - a one way telephone connecting the occupants of the rear seat with the chauffeur. If placed in a suitable position, it adds to the convenience of the occupants of the rear seat by enabling them to communicate their wishes to the driver as to direction, etc.

AUXILLIARY SEATING - in addition to individual auxiliary seats (see next entry), auxiliary seating that folded into the trunk or rumble area when not in use was found in many 2-pass. roadster, coupe and convertible body styles, hence the appellation "rumble seat". Once the rumble was open, access to the auxiliary seating was by two small step-plates, one on the rear bumper [generally on the right or sidewalk side], the other on the corresponding rear fender.

AUXILLIARY SEATS - generally folding, temporary seating found in passenger compartment of large sedans, limousines, town cars and open touring cars; of these, the larger so-called "jump seats" faced forward and had folding back rests; the flimsier so-called "opera seats" were less elaborate and were used in the smaller sedans, limousines and town cars; one faced the rear and used the partition as a back rest while the other was lateral to the direction of travel, faced right and generally had a hinged back-rest. In coupes and convertibles auxiliary seating was sometimes provided in the trunk area (see "rumble seat"); access was by small bumper and fender mounted step plates.

AWP - common abbreviation for a convertible body style known as the ALL-WEATHER PHAETON which offered adequate protection for driver and passengers even in the most inclement weather.

BAEHR PATENT (Fr.) - In 1913 Gustave Baehr applied for a patent for an all-weather 'transformable' automobile body and sold a license to a number of French and foreign coachbuilders who wished to duplicate his design in the years 1919 to 1928.

BARCHETTA - "little boat", a two-seat roadster with flowing lines. Any small, envelope-bodied car with no top or window fittings.

BARE CHASSIS - a "bare chassis" (as sometimes delivered by Cadillac, Chrysler and Packard to custom coach builders) consisted of frame, motor, transmission, wheels, radiator, hood, cowl and instrument panel.

BAROUCHE- a carriage term very rarely used for automobiles. The driver sat in an open front seat with two couples facing each other inside a closed cabin. There was a folding top over the rear seat.

BARREL-SIDE - a British coachbuilding designation to describe a style in which the sides of the body curved outward with a pronounced rounded inward roll at the top instead of a flat sill, and a lesser inward curve at the bottom.

BEACH WAGON - a term for station wagon used mostly in New England.

BEADING - a tubular kind of molding used for decorative effect around various body areas

BEDFORD CORD - a once popular upholstery cloth fabric with lengthwise ribs resembling corduroy.

BELT LINE or BELT MOLDING - the raised and sometimes ornate molding running around a car body approximately level with the top of the radiator, the base of the windshield, side windows and rear roof area; it could raised, painted, striped, indented; it could serve as a natural division for a dual or triple color scheme.

BERLINE - a closed sedan or luxury car, often with a small window which permitted the occupants to see but barely to be seen. Sometimes used to describe a four-passenger close coupled luxury 4dr sedan (usually of sporting design) with or without Imperial division. There is also some

cases of use of the term Convertible Berline - see CONVERTIBLE SEDAN.

BINDING - strip material used to trim out tops at the header bow, rear bow and in other applications. Usually made up from lightweight coated fabrics to complement or correspond with the top material

BISHOP TOP - a "one-man" top with interior-operated side curtains for full winter protection in a standard open car.

BLACKOUT TRIM or BLACKOUT ORDER - a decree given by governments in WWII (effective 31.12.1941 in the US) that no chrome or stainless-steel trim [except bumpers] was to be used on cars. Trim was now painted black, gray or the the lighter of carious 2-tone color schemes.

BOATTAIL - a speedster with a tapering (i.e. V-shaped) rear section

BODY FRAME - Pre-war body frames and door frames were built of cured white ash hardwood. Metal craftsmen hammered panels over the wooden framework. Brass castings were made for windshield frames, door hinges, handles. Painting was a long process in the early twenties, until the advent of Duco. Then bodies went in for upholstery and trim.

BOLSTERS - upholstery term designating the outer, padded portions of seats and seat backs

BONNET - (Br.) the hood over the front engine

BOOT - (Br.) the trunk

"B" PILLARS - in sedan styles, the second set of roof supports (between the windshield and rear portion of the roof).

BREACK (Fr.) or BREAK (Gb.) or Brake Gb.)- station wagon

BROADCLOTH - a popular upholstery material; of which there are two types: the first is a twilled, napped woolen or worsted fabric with a smooth, lustrous face and a dense texture. The second is a cotton, silk or rayon fabric made in plain and ribbed weaves, with a soft, semi-gloss finish.

BROADLACE - another upholstery material.

BROUGHAM - in early motoring a broad term signifying a closed car for two or four persons. In later forms often with an open front driver's compartment. When with sharp lines and flat surfaces it was called a PANEL BROUGHAM.

BROUGHAM DE VILLE (Fr.) - French equivalent of Town Brougham

BUGGY TOP - a 3-bow affair as used on early horse-drawn buggy or runabout.

BURBANK - a tightly woven cotton duck cloth made as an uncoated fabric for automotive soft trim. It was sold in various grades for top material, side-curtain material and for seat coverings. Offered as early as 1908, it was a particularly respected brand of top material during the 1920's. Usage diminished in the 1930's probably because automotive standards for waterproof materials exceeded the performance of Burbank. It was very expensive, too. The cloth was made in Great Britain and imported into the United States by Laidlaw & Co. of New York City.

BUSINESS COUPE - a simple two door coupe without a rumble seat

CAB - a term taken directly from horse-drawn carriage vocabulary and used to define a vehicle in which two passengers were enclosed while the driver was situated some distance away, usually in front and unprotected. But there were also electric cabs with the driver seated high up at the rear.

CABRIOLET (Fr.)- French word, derived from the verb "cabriolet" describing the movements of a prancing horse. It was used initially to describe a light-weight, open, two-seater, horse-drawn carriage generally fitted with a top that could be raised to protect the occupants in inclement weather. Later, among French coach-builders, it came to designate a convertible automobile for 2 or 3 passengers. Some coachbuilders adopted the term in to designate custom-bodied closed cars with a leather or cloth covering applied to the roof. It term went out of style in the mid-Thirties but made a reappearance in the 1980s.

CALIFORNIA TOP - a fixed rigid top applied to a touring car replacing the regular folding top, usually with sliding glass windows for weather protection. A period description follows:

"The California tailor-made automobile top has made its appearance in the East. Strangely this top, known to the trade all over the country as the California Top, is known in California, where it

originated, as the Craftsman Top. It is a strikingly beautiful, graceful top of the non-collapsible or rigid type as is shown by the accompanying illustration.

“The frame-work of the California top is made preferably of straight-grained hickory. The rigidity of the top is absolutely essential, and wrought iron braces and knee irons are used to hold the ribs in place.

“The outer covering of the top is preferably of some rich material harmonizing in color with the finish of the metal parts of the car. The material preferred in California consists of a strong cotton fabric base coated with a pyroxylin film. This material has the desired flexibility and vitality and retains its beauty after years of exposure to rain, sun and alkali dust. It is water-proof, grease-proof and stain-proof, is easily cleaned by brushing or washing with, soap and water. Many owners of cars having the California tops have been so much pleased with their appearance that they have had the bodies of their machines covered with the same material used in the top itself.”

CANEWORK - a Body styling feature. Decorative canework or "French cane" was used on car bodies from the beginnings of the automobile; it became a popular feature on formal European coach-work. Initially real cane was used but the results and durability were mediocre. Applied later by hand with a paint mixture from a tube it was an expensive operation. In the late teens France introduced the "cloth-paste" method which was easier to apply; cost was also reduced because the new method did not need so many coats of primer or base paint. All the painter had to do was measure exactly the size and shape of each panel to be thus decorated and make simple templates for the cane supplier. There were two methods of applying the pre-cut cane-cloth panels. The first was to glue them in place with a special mixture of glue; two coats of varnish were applied after the glue had dried at least 24 hours and a copper or cane beading applied to outline each panel. The other method was to apply a thick coat of varnish and press the cane panels into place before the varnish got too dry; finally two further light coats of clear varnish were applied. The cane design came in a number of sizes, the most popular being sizes 55 (approx. ½" between rows) and 90 (approx. ¾" between rows).

CARRIAGE BOWS see LANDAU BARS

CELLULOID - a compound of camphor and gun-cotton. Its transparency and flexibility are its chief characteristics. Both ISINGLASS and non-flammable celluloid were used to make small windshields in the early days of the automobile.

CHARABANC or CHARRABANC (Fr.) - a vehicle carrying many passengers; typically used for sightseeing. Early charabancs used for public transportation were often seen without a top. In Britain , charabanc is an earlier synonym for bus or omnibus.

CHASE - L.C. Chase & Co. of Boston, MA acted as selling agents for a consortium of New England weaving mills and a fabric coating firm from the beginnings of the auto industry until about 1940. They offered surface-coated materials (under the Drednaut trade name, but sometimes called "Chase" leather) and rubber-combined cloth materials (under the trade name Wexford), as well as other automotive textile products.

CHASSIS - (Fr) - derivation French; a frame in wood or metal; the frame work of a wagon; later the term was applied to the frame-work of a locomotive; then to the longitudinal and transverse frame members of a motor car. By extension it also designates the whole of the mechanical portion of a motor car. More correctly, however, the word chassis should only apply to the metal framework receiving the engine gearset and controlling mechanism.

CHAUFFEUR - (Fr) - derivation French, chauffeur, to heat. A chauffeur is a man in charge of a furnace or boiler fire. The first use of the word chauffeur was during the revolution of 1789, when bands of brigands heated or "chauffeur" the feet of their victims in order to make them reveal the place where the money was hidden. The "chauffeurs" were stamped out during the Consular period. The word chauffeur was first applied to motor car drivers under the popular supposition that they had to tend a fire. On the French railroads the chauffeur is the fireman; the engine driver is the mechanician.

CHAUFFEUSE - (Fr) a female CHAUFFEUR

CHILDS SYSTEM - A fabric-covered body made in the Weymann tradition but lacking the flexibility of the far superior Weymann system. Named after the patent-holder, Kenneth L. Childs (see WEYMANN)

CLASSIC - a term defined by the Classic Car Club of America to include only specific important marques built between 1925 and 1948. Often applied loosely by owners to any car.

CLAIRPAX - a lightweight body construction method pioneered by French coachbuilder Paul Audineau in 1924 which used aluminum panels over an ash framework.

CLUB COUPE - a two door closed car with a rear seat.

COACH - a two door sedan

COLLAPSIBLE - on certain body styles, this was an indication that all or only the rear part of the roof could be folded away, thus enabling the occupants to enjoy the breeze in their hair in fair weather.

COMMERCIAL GLASS - Most high-roof professional cars built since the late 1950s have custom-made extra-tall windows and windshields, incompatible with standard OEM glass. As some cheaper makes and models included the standard OEM glass, a distinction needed to made when describing the vehicle in catalogs and advertisements. Coaches equipped with commercial glass are consequently much more expensive, and provide their owners with increased status within the industry. One downside to commercial glass, is that it can be next to impossible to find commercial windshields for some pre-1980s professional cars. Most of today's Cadillac hearses plus a small percentage of Cadillac limousines continue to use commercial glass. Commercial glass is custom-made by a handful of manufacturers and can be up to 45% larger than regular OEM windows.

CONCOURS - a gathering or show of the elegant. It is often misspelled "concourse" which means a driveway, promenade or open space as in an air terminal.

CONCOURS D'ELEGANCE - literally an elegance competition in which not only the elegance of automobile coach-work was set off in competition but also the fashions of the great houses of haute couture [high fashions]. The first concours or competition was held on the French Riviera then subsequently in Paris, at the Parc des Princes, in 1927.

CONDUIT-INTERIEUR (Fr.) - interior-drive or enclosed-drive limousine

CONTINENTAL KIT - an outboard-mounted spare wheel, usually with a metal or Fiberglas cover.

CONTINUOUS COWLING [also see DUAL COWL] - this kind of "cowling" formed the border of the passenger compartment, mainly of open cars; in essence it was composed of narrow front, rear and side panels forming a rectangular "frame" around the seating area; continuous cowling looked like absence of cowling; the hood flowed back to the trunk area without any visible molding or beading to mark off the seating compartment.

CONVERTIBLE - a car with a folding top and permanent windows.

CONVERTIBLE BERLINE - see CONVERTIBLE SEDAN

CONVERTIBLE ROADSTER - a convertible is an open car with windows; a roadster is an open car without windows, hence a term which contradicts itself. Used by Lincoln, Chrysler and others about 1930 to emphasize sportiness.

CONVERTIBLE SEDAN - interchangeable in some cases with the term All Weather (all weather sedan) and sometimes also considered a TRANSFORMABLE, usually without a division. Typically feature fixed or removable window frames with roll-up or pull-up glass side windows and a folding top with rigid sections of weather seal.

CONVERTIBLE TOP - early cars had either leather, rubber or mohair tops that could be raised to keep out inclement weather or lowered to take in the sun or sights. Leather tops were almost always made with a black patent leather exterior backed by a cotton-wool padded rubber impregnated cloth. Rubber tops were made of high quality, rubber-covered 3-ply cloth with heavy jean backing; it was web-reinforced and padded with cotton wool. The mohair top was stitched from black mohair Mackintosh cloth. Many customers preferred the

rubber top as it held its shape well and gave the car a smooth top line when raised unlike the leather and mohair tops which were permanently wrinkled and uneven.

CONVERTIBLE VICTORIA - a four passenger two door two window cabriolet.

COUPE - a closed car with two doors for two or three people. May also have a rudimentary rear seat in which case it is usually called a Club Coupe. Originally a vehicle 'cut' by a glass division, fixed or moveable, behind the front seats. The driving position was only partially protected by the roof whilst the totally enclosed rear was very luxurious. According to American stylist J. Frank de Causse, the word coupe is pronounced "Koo-pay"; a "Koop" is where the chickens stay.

COUPE-CABRIOLET or DOUBLE CABRIOLET - A long vehicle, the front part of which was designed as a coupe, whilst the rear part had the collapsible hood of a cabriolet. There were often two supplementary seats.

COUPE CHAUFFEUR (Fr.) - chauffeur driven car with passengers fully enclosed and the chauffeur exposed. Body has a blind rear quarter.

COUPE de VILLE - "town coupe" - applied imaginatively to various body styles Usually a four passenger two door car with a permanently closed roof over the rear seats and a removable top covering the front seats. But Renault and Bugatti used this term for a Panel Brougham. See SEDANCA.

COUPIENNE - French term coined for fabric grained leather that was introduced on some models by Kellner at the 1928 Paris Salon in an effort to overcome the difficulty of cleaning light canvas tops that were so much in vogue in Europe.

COUPELET - a term used especially by Ford to describe a Model T two-seater Cabriolet.

COUPE LIMOUSINE (Fr.) - chauffeur driven car with the passengers fully enclosed and the chauffeur exposed. Body has rear quarter windows.

COUPE MILORD (Fr.) - See VICTORIA

COUPE ROADSTER - a term used by Packard to describe a Convertible Coupe or Drop Head Coupe - see CONVERTIBLE COUPE or DHC

COWL - Generally the horizontal metal body panel between the engine hood and windshield. Some pre-war classics had a dual-cowl or secondary cowl behind the front seat.

"C" PILLARS - in sedan styles, the third set of roof supports located between the rear window and ¼- window in the roof ¼-panel.

CRANK REGULATORS - the term given to winders used to raise and lower windows and secondary windshields

CRAFTSMAN TOP - see CALIFORNIA TOP

CYCLE FENDERS - usually a front and sometimes a rear fender similar to that used on a bicycle which follows the curvature of the wheel .

DAMASCENING - DAMACENE or DAMASCEEN WORK - a form of engine turning to give an ornate metal finish [Fr. "bouchonnage"]. It was achieved by drilling a tight-knit pattern of circular swirls and was an eye-appealing but costly way of finishing items like engine blocks or hoods, or dashboards. When mild steel was used in lieu of aluminum or stainless steel, the parts had to be clear-varnished to prevent corrosion.

DECKING or DECK MATERIAL - prior to the advent of all-steel tops on closed bodied cars, the flat “deck” of the roof top was covered by a coated fabric panel. Typically a surface-coated fabric was used. Some of the more expensive car bodies wore a full roof cover, with either a surface-coated deck material, or a rubber-combined cloth topping.

DEMI-TONNEAU - An open body style that consists of a runabout with a detachable tonneau in the rear.

de VILLE (Fr.) - From the French de la ville or de ville meaning "of the town". In French coach building parlance, a coupé de ville, from the French couper (to cut) and ville (town or city), refers to a town car that is "cut" by a division between the passenger and driver compartments.

de VILLE EXTENSION - a sliding roof over the front seat with side arms that folded back into the remaining roof thus producing a Sedanca configuration in metal rather than the usual fabric.

DHC (Br.) or Drop Head Coupe - see CONVERTIBLE

DICKEY (Br.) - This is the English name for the "rumble" seat. It is also known as the "Mother-in-Law" seat and is a folding seat built into the trunk area of many pre-war automobiles.

DI-NOC - an imitation wood veneer used to decorate instrument panels, door friezes and divisions in the 1940s & 1950s. Chrysler Town & Country's had Di-Noc Mahogony decals after 1946, not real wood. A Trademark of the The Di-Noc company of Cleveland, it is still used today by stylists and clay modelers. Di-Noc is available as a 54" high by 200 feet long, rolled up decal with hot water peel-off backing. Very pliable, the clay modelers apply it by wetting the clay model, then simply laying the Di-Noc on the clay and squeegeeing out the all the water trapped between the two. It takes about 6 hours for the Di-Noc to dry enough to be handled.)

DIRIGOLD - a gold-looking metal developed by Carl Molin, a Swedish metallurgist in 1914 from brass, copper and, he said, about two percent gold dust. Production started in Sweden in 1919 and eventually the company moved to Kokomo, Indiana. The name of the product and company was changed in 1935 when the Federal Trade Commission brought suit against the company, charging there was not enough gold in the product to warrant the name. So the company became The Dirilyte Company of America. Major Bowes 1937 Chrysler Imperial Airflow CW limousine is perhaps the most famous car that is fitted with Dirigold hardware.

DIRILYTE - see DIRIGOLD

DISC WHEEL - a continental fashion that was introduced on American cars after WW1; there were two distinct types. The first consisted of a solid disc attached to the wheel hub and supporting the rim at its outer perimeter. The second, a thin, decorative disc that simply hid the wooden spokes of artillery wheels. Disc wheels were typically body-colored however they were available in nickel and chromium plate as well.

DIVISION GLASS - a glass partition, also referred to as "division window", located between the driver's and passengers' compartments in spacious limousines. Adding such a division to a sedan turns it into an "imperial" (what is called a "limousine" in modern parlance). The early division was retractable, using a crank-down system; sliding versions were also used. In the modern age, electric motors replaced the hand crank although a gradual return to the sliding division has been noticeable in recent years in order to reduce the overall weight and production cost of such cars.

Some 1920s & 30s motorists drove around in their "common" convertible sedans with their tops and side windows down and division glass raised, in the hopes of impressing others with the look of the much more expensive dual-cowl phaeton. This common practice led to brisk business for glass shops who replaced these panes on a regularly basis.

DOG CART - Very early horseless carriages with engines placed directly under open passenger compartments were sometimes referred to as dog carts. The term came from the the horse-drawn dog cart, a coach where passengers rode on top of enclosed containers that contained the dogs used in fox hunting.

DOESKIN - a popular upholstery material in the Golden Age of coach building of the late Twenties and early Thirties.

DOODLEBUG - A bus outfitted with railroad wheels and run on railroad tracks, originally used to carry passengers, occasionally used by railways to transport their own employees from station to jobsite.

DOOR PADS - (upholstery term) The upholstered part of a door or section of door below window glass

DOORS and DOOR HINGES - look closely at the door configuration of coachbuilt car and you'll notice that they differ from one style to another in the way they open. The various configurations are as follows:

center-hinged [both front and rear doors are hinged to the "B" pillar, aft of the front seat]

forward-opening doors [front doors are hinged at the "A" pillars and the rear doors at the "B" pillars]

rear-opening or so-called "suicide" doors [front doors are hinged at the "B" pillars and the rear ones at the "C" pillars]

center-opening or rear "suicide" doors [front doors hinged at the "A" pillar and rear doors at the "C"

pillar], made for easy access of passengers or loading of parcels.

DOUBLE BERLINA - a lengthened berlina with the driving position enclosed but separated from the rear part of the vehicle.

DOUBLE LANDAULET - a lengthened landaulet with two permanent seats plus two occasionals in the rear, and a driving position in front.

DOUBLE PHAETON - a phaeton with two double seats, including that of the driver.

DOUBLE TONNEAU - a lengthened tonneau in which the front seats were completely separate from the rear.

DOWMETAL - Shortly after World War I, Dow Chemical Company metallurgists developed an alloy called "Dowmetal". One-third lighter than aluminum, it was a refined magnesium to which was added about six percent aluminum and one-half percent manganese (a chemical used to harden magnesium). Dowmetal was widely promoted for automotive and aviation uses and was highly profitable for the company, eventually giving it a virtual monopoly on magnesium production in the US. Dow had a number of experimental Dowmetal open and enclosed car transport trailers built by Fruehauf for Detroit's White Star Lines in the early 1930s (1933), but evidence of automotive use after that time is lacking.

DREDNAUT see CHASE

DRIDEK - surface-coated top material manufactured by the L.J. Mutty Co. of Boston, MA from about 1915 through 1930.

DROPHEAD (Br.) or DHC - convertible, usually a "Drophead Coupe" - see CONVERTIBLE.

DROPHEAD COUPE (Br.) or DHC - see CONVERTIBLE.

DROPPED DOOR SILLS - up to 1930 car doors did not extend below the frame rails. In 1928, the French coach-builder Gaston Grummer (quickly followed by others like Kellner and Van den Plas) startled and pleased the buying public by dropping the doors to running-board level, thus suppressing the valances. Other coach-builders, including Fleetwood, found a compromise by placing the door sills at an intermediate point between the top of the frame and the running boards.

DUAL COWL - a touring car with a rear windshield mounted on a folding cowl which covers part of the rear compartment.

DUAL COWL or SECONDARY COWL - it divides the front and rear seating areas of an open car (touring car) into two distinct compartments. Some secondary cowls were fixed, other hinged. Some included a secondary windshield that could be cranked down or folded forward, flat against the cowl. On a few bodies the cowl and windshield raised automatically when the rear door was opened.

DUCO LACQUER - an exterior paint finish first used on 1923-24 General Motors Vehicles (Oakland and Cadillac) with quick drying properties that greatly speeded up automobile production.

DURABLE - all-cotton, rubber-combined cloth top fabric produced by Haartz.

DURALUMIN - a trade name derived from the material's manufacturer, Dürener Metallwerke AG and aluminum, its primary component. The age-hardened aluminum alloy was discovered by German metallurgist Alfred Wilm while working at Dürener Metallwerke AG (Düren, Nordrhein-Westfalen, Germany) in 1903. Wilm found that after quenching, an aluminium alloy containing 4% copper (+ small amounts of manganese and magnesium) would slowly harden when left at room temperature for several days. Further refinements led to the commercial introduction of Duralumin in 1909. Pre-war, the material was confined for use by German industry which used it for framing the recently introduced rigid airship. After the War Dürener Metallwerke introduced a more tear-resistant formula that was adopted by the American aircraft industry in the late 20s who found it well suited to recently introduced monocoque construction techniques.

"E" AWARD - the Army-Navy Award for Excellence in War Production (WWII), normally awarded when a firm completed a large order for the US War effort or filled an order in a short period of time. At the ceremony, the employees would be given an enameled pin mounted on a card certifying their contribution to the war effort with a message from the president. The employer would be presented with an "E' flag and banner

and outstanding employees would be presented with a special certificate.

ELASCOFAB - a synthetic, coated fabric having the appearance of leather.

ENGLAND SYSTEM see GORDON ENGLAND

ESTATE CAR - a station wagon

EVERFLEX - a British single texture vinyl top material that has been popular and widely used in Europe for many years.

FABRIC-BODIED see WEYMANN

FABRIKOID - a pyroxylin surface-coated fabric made by a facility of the same name in Newburgh, NY from 1908 through the 1930's. E.I. DuPont de Nemours bought the plant in 1910, offering Fabrikoid as a DuPont product thereafter. While some of this output was top material in earlier years, the production of leatherette (or artificial leather) dominated the later years of activity under this trade name. The name "Fabrikoid" was sometimes used as a synonym for pyroxylin coated fabrics.

FAUTEUILS (Fr.) - French term for an armchair.

FAUX CABRIOLET (Fr.) - a fixed head coupe made to resemble a cabriolet usually by using landau bars and a patent leather or vinyl covering.

FENDERS or WINGS (Br.) - the fender is that part of an automobile covering the wheels. They are of many and varied shapes: cycle fenders, flat ones, ridged ones, crowned ones, skirted ones and the so-called clamshell fenders of the early Thirties and the pontoon fenders that marked the transition between separate and integral fender designs in 1950.

FENDER SKIRTS - prior to 1932 front fenders did not enclose the outline of the wheel, they followed a straight line from the top of the fender to the running boards. 1932's Graham Blue Streak was the first production car to feature fenders that were drawn down to hug the wheels. The Blue Streak was designed by Amos Northrup of the Murray Body Corporation.

Some removable fender skirts totally enclosed the wheel as on some 1930s Cadillacs, Chryslers, Lincolns and Packards. In the late 1950s fender skirts re-emerged as a popular options on some Ford and GM products.

FEVAL see WEYMANN

FINE-LINE (Br.) - a body stripe

FINISH PANELS (an upholstery term) - the painted panels on doors, rear quarters and front seat back-rests.

FITTED TRUNK - the integral automobile trunk did not come into its own until the late Thirties. Before that, the trunk was removable. In the luxury automobiles of the classic era many removable trunks were designed for use with a specific car; when installed on the luggage rack it looked like a part of the car rather than something added on.

FIXED HEAD COUPE (Br.) or FHC - a closed coupe

FLASQUES (Fr.) - French term for wheel disc, a styling device originating in Europe around 1930 to hide wire wheels.

FOOTMAN LOOPS - C shaped metal brackets that were screwed to the door jamb of a pre WWII car, through these a piece of leather or fabric was "looped" and then both ends were screwed to the body, thus the strap through the loop prevented the door from traveling out to far when opened and hitting the fender or springing the hinge.

FORDOR - Ford's name for a four door sedan.

FORMAL - a car with enclosed rear quarters and, often, a leather-covered roof.

FRIEZE - a band of painted or sculptured decoration, generally immediately below windows or division glass.

FULL CLASSIC - a term defined (and trade marked) by the Classic Car Club of America to include only specific important marques built between 1925 and 1948.

GARNISH MOLDING - the frame next to the glass on the inside of a door, windshield or back light.

GLASS SALOON - a large closed vehicle, generally similar to a double berlina but with very large windows.

GLASS PARTITION or DIVISION - Located between the driver and passenger compartments of large sedans. Cars with this feature are known as limousines or imperials. Cadillac offered an electrical-powered division glass in 1941.

GOLF BAG DOORS - small side doors giving lateral access to the floor area below the rumble seat on roadsters and a few convertibles.

GORDON ENGLAND -

Before and during World War I, E.C. Gordon England was employed in the aircraft industry, becoming an unusual combination of test pilot and designer, and then a factory manager. After the War he became interested in motor racing and in 1922 he persuaded Sir Herbert Austin to prepare an Austin Seven chassis for him, which he and his father, George, bodied. His success in racing encouraged him to offer his own Austin Seven-based sportscars to the public through his father's garage, George England Ltd.

England believed that the biggest problem with existing coachwork was its weight and therefore inertia, and he set about designing a light but very snug body. This was achieved by the use of plywood box-girders and an ash framework covered with thin plywood panels, from which the door and window openings were cut afterwards. The entire exterior was then covered in fabric; although steel paneling was later offered. Its most novel feature was a three-point mounting system that isolated the bodywork from the chassis thereby reducing the creaks and groans experienced with normal composite bodies. On the outside, it looked just like a Weymann, but its internal construction didn't infringe on any of Charles Weymann's patents. In fact, E.C. Gordon England applied for and received a British patent for his version of the flexible body.

The first Gordon England model sold to the public with the new plywood-based body was the Austin Seven Brooklands 2-seater of 1924. Each Brooklands racer came with a certificate attesting that it could reach the speed of 80 miles per hour (approximately 130 km/h). E.C. Gordon England co-piloted one of his own cars in the 1925 24 Hours of LeMans, but failed to finish the grueling race.

The firm, still named after his father, was renamed George England (Motor Bodies) Ltd. in 1925. Later that year, Austin dealerships started selling his 2-seat Cup model and Fabric Saloon. That model evolved into the Austin AD saloon of 1926 - Austin's first closed car on a Seven chassis - with England supplying all of its bodywork. In 1927, almost 20,000 Austin Sevens were built with England bodies.

The England system was used on a Rolls-Royce chassis as early as 1925 and by 1927 it had been applied to Bentley, MG, Morris Oxford and Wolseley chassis. They exhibited a handsome aluminum-paneled Invicta at the 1927 Olympia, which was Great Britain's version of New York's Auto Salon. The company continued to exhibit at the London Show through 1929 when it was reorganized as Gordon England Ltd.

In 1928 the Holbrook Company of Hudson, NY became the sole US licensee of the Gordon-England patent light-weight body. Before Holbrook produced a single example, the British firm bought a controlling interest in Holbrook, hoping to establish a US branch just as Weymann had formed the Weymann-American Co in Indiana. Unfortunately, the Depression put an end to the experiment months later and the combined firm declared bankruptcy at the beginning of 1930.

GOUTTE d'EAU (Fr.)- a body with a "tear drop" design, flowing down to the rear.

GOVERNOR - a device used with the carburetor to maintain constant engine speed regardless of load.

GP (Fr.) - Grand Prix (Great Prize)

GRAIN - the embossed decorative pattern found on the outside (facing) of surface coated top materials. It might resemble a leather or animal hide surface, in keeping with the makers desire to provide an artificial leather. In other instances, the grain might be a geometric pattern, or it might resemble a cloth or linen surface texture. Some of the more common grains encountered in soft-top trim materials are:

- Bison: an animal-hide type of pattern
- Cobra: a reptile-hide pattern, commonly used from ~1912 to ~1930
- Colonial: an animal-hide pattern, extensively used in No. America for decades
- Crush: an animal-hide pattern, used in the 1950's and 1960's (Packard + Jeep)

- Denim: a fine geometric pattern used for Jeep® vinyl tops since about 1970
- Ford: a flattened “pebble” grain, not currently available
- Long / Long Cobra: reptile-hide pattern, an enlarged version of Cobra grain 1915 - 1930
- Monaco: a deep animal-hide grain common in Europe in the 50’s and 60’s
- Pebble: a pebbly geometric pattern, most common 1915 to 1930
- Pinpoint: a geometric pattern, see Standard grain
- Sierra: a shallow and subdued animal-hide pattern for accessory materials
- Standard: the Orig. Equipment “standard” during the era of vinyl soft-tops from about 1954 to about 1994. Also known as “diamond” or “pinpoint” grains. This is a geometric pattern made up of tiny, four-sided pyramids.

In addition to the soft-topping embossings noted, there were other grains used for vinyl roof cover fabrics during the North American vinyl roof cover craze from the mid-sixties through the seventies. Notable examples are Laredo grain on Chryslers, Corsica and Valino grains on Fords and Elk, Levant and Tuxedo grains on GM cars. Yet another array of grains (with and without accompanying surface print patterns) were used on vinyl upholstery materials for cars. Likewise, other grains were used on some top decking materials from the 1920’s and 1930’s. Embossing techniques improved over time. Prior to 1920, coated surface embossings were shallow and indistinct. Improved embossings gave a better surface appearance on toppings made in the twenties and thirties. Vinyl embossing yields much better depth or definition, so the modern day surface-coated fabrics look better than their pre-1920 ancestors.

GRAN TURISMO (It.) - grand touring

GROOMING - in the early days of enclosed car motoring, grooming consisted of choosing upholstery materials (plain cloths, striped cloths, uncut mohair, velvet, figured velour, silk armures), and tufts, fitting the interior with window regulators, door pulls, light switch plates, dome lights, ventilators, corner lights or reading lights, "chofones" (i.e. chauffeur inter-phones), cut glass flower vases, vanity cases and their fittings (mirrors, notebooks, card cases, bottles, pin cushions, ink wells, stamp boxes, pens, pencils, paper, envelopes, etc.), smoking cases, cigar/cigarette lighters, ash trays, clocks, pillows, back-rest pillows, robes, motor rail pockets, foot warmers, hand warmers and the like.

GT - Grand Touring

GTO (It.)- Grand Turismo Omologato, a racing car that had to be homologated (produced in a limited number) in order to qualify for a racing series.

HACK - Slang term for a taxi cab. Occasionally used to refer to a bus, some early literature pictures International school buses with placards identifying them as a "school hack".

HARDTOP - originally a convertible body with a non-removable hardtop installed at the factory. The main feature that distinguishes a hardtop from a sedan is that when the front and rear windows are rolled down, there is one large open space with no frame or post between the front and rear seat area. Another feature is that the doors do not have any external frames to support the windows.

HAARTZ CLOTH - a generic term used more or less indiscriminately to refer to most any rubber-combined cloth top material especially the cotton fabric manufactured by Haartz of Boston, MA.

HAPPICH - a German cloth top material marketed by Gebruder Happich GmbH and manufactured by Rode and Schwalenberg GmbH. While offered under the Sonnenland trade name since 1972, the Happich name is still associated with this material. It is also known among car enthusiasts as the "original German material".

HASKELITE - trade name for an easily-formed metal-faced plywood product used in forming the roofs and sides of commercial vehicle and bus bodies made by the Haskelite Manufacturing Corporation of Chicago, Illinois.

HEADER BAR - the front support of a convertible or soft top that secures it to the windshield frame

HEADLINER - the inner lining of the roof area, rear quarter panels and rear roof panel of a car

HERDIC - a type of horse-drawn carriage, used as an omnibus, invented by Peter Herdic of Williamsport, Lycoming County, Pennsylvania in 1881.

HOMASOTE - a produced that superseded the Agasote fire-resistant high-density fibre-board panel. Homasote panels added a high degree of weather-resistance and became a popular automotive roofing material in the late teens and twenties. It was also used by commercial body builders as interior and exterior panels in delivery van and ambulance bodies. Homasote was a product of the Agasote Millboard Company/ later the Homasote Company of West Trenton, New Jersey. - see AGASOTE

HOOD - the sheet metal covering the engine

HOOD (Br.) - a convertible top

HYPALON - a synthetic rubber developed by DuPont. Haartz (and possibly DuPont) offered this as a surface coating on line of top materials in the 1950's. In the automotive industry, Hypalon material is best remembered as being used as roof cover material on Packard Caribbean hardtops in the mid-fifties.

IMPERIAL - an enclosed body featuring a fixed or mobile glass division between front (driver) and rear (passenger) compartments.

IMPERIAL CABRIOLET - a sedan with enclosed or blank rear quarters and a leather top covering simulating a "cabriolet", that is a convertible, with its top up.

IMPERIAL FRONT - a Town Car with a convertible chauffeur's compartment that included a temporary roof for use during inclement weather.

IMPERIAL LANDAULET - a sedan featuring glass division and opening roof portion over the rear seat passengers

INNENLENKER (De.) - interior-drive or enclosed-drive limousine

INSERTS - the part of the seat cushion and back rest between the bordering bolsters.

INSIDE-DRIVE LIMOUSINE - a fully-enclosed, chauffeur-driven limousine. Previously these cars had been open or partly open in the driver area.

IN THE WHITE - bodies delivered to a chassis manufacturer minus trim, paint, varnish and hardware.

ISINGLASS - typically a window made from thin sheets made of a material other than glass. Early isinglass was made from a transparent sheet of gelatin, processed from the inner lining of a Sturgeon's bladder. As it was flexible, it was perfect for the storm curtains and window on early touring cars. The term is now commonly used as any non-glass sheet material which passes light, such as mica, oiled paper, celluloid or plastic. Early isinglass of all varieties yellowed and scratched easily.

JONARTS - a trademark of Haartz used most prominently for the company's premier rubber-combined cloth top materials from the late 1920's into the 1950's.

JUMP SEATS or OPERA SEATS - two, wide auxiliary seats that folded into the division partition or the rear of the front seat and could accommodate up to 3 adults in relative comfort for long-distance travel. They were fitted in a number of the larger sedans, limousines and touring cars.

KAPOK - a light weight fiber insulation obtained from the fruit of the Asian Kapok (silk cotton) tree. Both cork and Kapok fiber matting were commonly used for insulating refrigerated truck bodies prior to the introduction of spun glass (fiberglass) insulation in the mid 1930s.

KELSCH - a patented felixble body system similar to Weymann used by a few Italian coachbuilders from the early 1920s to the beginning of WWII, most notably Mario Casaro and Giovanni Boneschi of Turin (Torino).

KHAKI CLOTH - an uncoated, tightly woven cotton fabric dyed a khaki shade used for automobile tops prior to 1915.

LACQUER - a new kind of paint introduced by General Motors in 1923/1924 which considerably speeded up body production (also see DUCO)

LANCEHEAD (or RAISED) PANEL - coach-builders term describing the raised and pointed

panel pointing forward on the cowl of some Fleetwood custom bodies. It was generally matched by a second, curved panel running from the radiator back across the hood and down to the body sill, following the curve of the side-mounted spare wheel.

LANDAU - derived from the name of the German city of Landau. It was used in earlier times to describe an open, 4-wheel, horse-drawn carriage with front and rear suspension, having two opposite-facing seats aligned in parallel to the wheel axles, and one or two folding tops for both the front and the rear seats (in France the term "landau" describes an infant carriage - a pram - with a folding top). Also can be any two seated vehicle which could be fully converted by a two section opening convertible top.

LANDAU BARS (or IRONS) - these could be functional or purely decorative; they are to be seen on many formal sedans and limousines fitted with a leather roof covering. They could be painted, nickel-plated or chromium-plated according to customer preference. When functional, they formed an integral part of the folding mechanism for all or part of the roof covering. The decorative irons were attached to the rear roof quarters whereas the functional ones reached down below the belt line. Some folding tops featured concealed bows built inside of the roof.

LANDAULET (Fr.) - In automobile parlance, a "landaulet" describes an automobile in which the driver's compartment is separated from the passenger area by a fixed or mobile glass division. This was generally a formal body style with a leather or cloth roof portion over the rear seating area that could be folded back to afford the occupants the pleasure of an open air ride. Landaulet feature (folding roof) was reserved mostly for town cars although it was used also occasionally on sedans and limousines.

LANDAULETTE (Fr.) - a two door car with a Landaulet roof (the top over the rear seats folds down).

LEATHERETTE - a surface coated material for tops, upholstery and interior trim on automobiles. Since the 1950's the term has been used more or less generically for all kinds of vinyl coated fabrics, and remains in active use. Also see ARTIFICIAL LEATHER

LIGHT - a side window.

LIMOUSINE (Fr.) - plural LIMOUSINES

[1] From the French limousin and limousine, belonging to or originating in the French town of Limoges, more famous for its porcelain tableware than for these early luxury horse-drawn carriages and chauffeur-driven automobiles. The limousine generally differed from the sedan in having a glass partition or division between the front (chauffeur) and rear (owner/passenger) compartment. Early partitions were fixed and the rear-seat occupant could hail the driver through a microphone and horn speaker; other partitions had a hole drilled in them. Later partitions were in two parts that slid open to left or right; others wound down into the partition by means of a crank or, later, an electric motor.

[2] Derivation, French. A motor car body with a permanent top projecting over the driver and having a protecting front. The name was originally applied to a cloak worn by the inhabitants of Limousine, an old province of central France. It was later extended to the covering of a carriage, and then to one type of enclosed motor car body. At present the term often is applied to a complete car having a limousine body.

LINING - the backing or inside surface of a top material. Besides referring to the inside surface of the topping itself, the term often applies to the additional lining of uncoated cloth inside the top frame and bows, functioning as a headliner. Tops with a separate liner inside the top frame have been available on some vehicles through all eras of automobile production, and back into the heyday of horse-drawn carriages.

LITES (Br.) - Windows

LIVERY - in the early days of enclosed car motoring many owners employed chauffeurs and sometimes also a footman. Proper livery (or clothing) for the chauffeur enhanced the general appearance of one's automobile. Double-breasted suits were considered correct apparel as were breeches with puttees (far smarter than trousers). Caps were a must, and cap protectors were needed in cars with open front chauffeur compartments.

MACKINTOSH - a rubber-combined raincoat material produced in the 1800's which came into use to describe any kind of rubber-combined cloth fabric by 1900. With respect to auto top materials, it usually referred to those composed of cotton fabrics on both sides.

MARQUE (Fr.) - (Pronounced "Mark") a make or brand of car

MERITAS - a nitrile-coated artificial leather produced by Standard Textile and used in place of aluminum or steel in composite body construction. Meritas was very similar to Zapon - another leather-alternative - and was used by the John W. Henney Co. and other North American coachbuilders in the mid-1920s. Like Zapon, Meritas was a heavy chemical-impregnated fabric that was successful in preventing the drumming frequently heard in metal-bodied vehicles. Unlike Weymann, who were coachbuilders, Meritas was not. A Meritas body was a wood-framed body covered with Meritas-brand fabric. Weymann bodies were light ash-framed bodies built by a French coachbuilder named Charles T. Weymann and were usually covered with Zapon, an artificial fabric made by a competitor of Meritas'. A small number of American coachbuilders built Weymann bodies under license. The Weymann-American Company of Indianapolis, Indiana was an American coachbuilder partially owned by Charles T. Weymann that built bodies for Stutz and others in the early 1930s.

METALLIC PAINT - an accidental DuPont invention from 1928, when a steel mixing ball broke up while mixing a batch of maroon lacquer for three Cadillac show cars. Also called opalescent paint.

MM - Mille Miglia, a 1000 mile Italian road race from 1927 to 1957

MOHAIR - the yarn and cloth produced from the hair of Angora goats. In automotive textiles mohair was a robust and very cleanable fabric, used both for top material and for closed-car seating fabrics (the latter was usually made up with a pile surface). The term was indiscriminately used and in the top material field it generally meant a rubber-combined cloth topping having a face fabric of mohair yarns and cotton yarns, or entirely of mohair yarns. It was introduced to the North American auto industry in 1907 by J.C. Haartz of Boston, MA. The period of greatest use was from 1907 through 1915, although some usage occurred in the United Kingdom into the 1950's. Some early advertisers claimed to offer "silk mohair" and "cotton mohair". The former was untrue. The term "mohair" is still used in the United Kingdom to refer to rubber-combined cloth "hood" (top) fabrics, although little, if any such material contains true mohair.

Mohair exterior cloth on period top materials can be distinguished by two senses. The mohair cloth feels harsher than comparable cotton cloth (such as on the top material lining). In appearance, fresh surfaces of mohair cloth are shinier than cotton (imparting a synthetic-looking sheen). Under magnification (use at least 10X magnification), mohair fibers and fiber-ends look like bundles of fine wires, quite distinct from cotton or wool fibers.

MOON DISCS - a smooth, chrome-plated, convex hub cap or full wheel disc, sometimes with a full width "spinner" blade (used as a grip to remove the cover) that flickered as the car was under way; these were a popular Hollywood accessory in the Thirties.

MOTHBALLED - US Government order all unsold 1942 vehicles mothballed on February 14, 1942. See the timeline below for further details:

Jan 1, 1942 – The Freezing Order: The government banned the sale of all new cars until Jan 15th when a rationing plan would be released.

Jan 10, 1942 - The Freezing order was amended to permit the sale of cars to the following: 1) US Army, Navy, Marine Corps. and certain other US Government Agencies; 2) Certain individuals with an assigned rating of A-1-J or higher; 3) US Defense or Armed Forces contractors holding an A-1-J or higher rating.

Jan 14, 1942 – The Stockpile Order: The government issued an order to stockpile all cars shipped after Jan. 15. Vehicles shipped after that date could not be sold until permission to sell was granted by the government. Obtaining said permission took many months, and some approved buyers had to wait as long as a year to get a vehicle.

Dealers were required to make the tires and tubes from stockpiled vehicles available for sale to any "appropriate agency" if so requested. The selling price of stockpiled vehicles was limited to the manufacturer's list price (fob), plus federal excise tax, freight and 5% of the list price plus freight, or $75, whichever was lower. Starting on Feb. l, dealers were allotted a monthly allowance of 1% of the list, or $15, whichever was lower, for storage, maintenance, insurance and finance charges.

Jan 15, 1942 – The planned rationing order was postponed indefinitely.

Feb 1, 1942 - All US motor vehicle production is halted.

Feb 14, 1942 – Mothball Order - The government places all new cars currently in dealer inventory into long-term storage.

MOTHER-IN-LAW SEAT - a single seat attached to the back of a two-seat car, the forerunner of the rumble seat. It can also denote a seat placed on the opposite side of the car from the driver.

MUFFLER CUT-OUT - a valve located on the exhaust pipe between the engine and the muffler. When opened it allowed exhaust gas to pass directly to the open air which made a great noise and slightly increased power.

NAUGAHYDE - a surface-coated fabric originally made for the automotive upholstery in the 1930s and later for furniture by the U.S. Rubber Co., later Uniroyal.

NEVERLEEK - a surface-coated, double texture material made by the FS Carr Company in Massachusetts from about 1915 through 1930.

OPERA COUPE - a two door closed car with a small folding seat beside the driver. This allowed easy passage to a rear seat for two, usually offset to the right in left-hand drive cars.

OPERA LIGHTS - side lights mounted on center pillar or quarter panel.

OPERA SEATS or CHAIRS - fitted in some short wheel base sedans to increase passenger capacity from five to seven for short distances. An explanation of the origin of the name is provided in the Fleetwood color portfolio of 1930 models; these opera seats were designed on the same principle as the strapontin (the small, folding seat that is mounted on the end of many of the rows of seats in the Paris Opera) only more comfortable! The so-called "opera seats" could consist either of two side-facing seats or more commonly the LH seat facing sideways and the RH one facing the rear; these occasional seats were not as luxuriously finished or as comfortable as the full-width "jump seats".

ORLON - DuPont’s trade name for an acrylic fiber cloth used as facing on some rubber-combined cloth toppings in the 1950s. During most of this time it was only offered in its “natural” color of cream white (which would yellow noticeably with prolonged weathering) but after 1954 black Orlon became commercially feasible. Orlon cloth was of very fine weave and is sometimes mistaken for vinyl.

PANEL BROUGHAM - see BROUGHAM

PANTASOTE - a synthetic leather material used for the folding tops of some formal, landaulet models; it was less flexible than canvas but afforded greater protection in inclement weather. The Pantasote Company of New York offered several varieties of top materials by 1905 at which time they introduced the first surface-coated, double texture material. This latter offering had a unique surface coating that could withstand exposure to gasoline and oils. Thus, it became one of the favored choices of car makers throughout North America. Pantasote offered the standard black surface coating (with at least a few choices of embossing patterns by the mid-teens) as well as brown and two shades of red. The trade name was also used generically for surface-coated, double texture toppings.

PARTITION - see DIVISION GLASS

PETTINGELL AUTOMATIC HAMMER - also see C.F. PETTINGELL

Charles Franklin Pettingell of Amesbury, Mass. established a machine shop in 1873 that specialized in building precision milling and wheel-wright machinery for the carriage industry. An early product of the firm was the C.F. Pettingell Rim and Felloe Rounding Machine which was used to manufacture carriage wheels.

Pettingill’s shop was destroyed by the 1888 Amesbury Fire, but he rebuilt and continued to

introduce new machinery. By the late 1890s C.F. Pettingell manufactured over 30 different machines, all earmarked for the carriage building industry. Products included tenoners, tilting arbor bevel saws (table saws) and irregular template dressers for wooden working plus friction cutters and rolling formers for sheet metal fabrication and their ever-popular rim and felloe rounding machines.

In 1905, C.F. Pettingell retired and A.G. Bela purchased the firm reorganizing it as the Pettingell Machine Co. The firm's most popular product was the Pettingell Automatic Hammer, which was available in two sizes, the #1 and the #2. Body panels that required several days of hand hammering could be finished in less than an hour using the labor saving device which was designed specifically for the automotive body business. The firm's largest customer was the Fisher Body Corp. who used over 500 Pettingell power hammers in their factories. During the teens, twenties and thirties their specialized equipment could be found in every firm in the country that dealt with either manufacturing or repairing composite automobile bodies.

Very few Pettingill Automatic Hammers survive, and restored examples sell for $20,000 or more.

PHAETON - from the Greek "Phaethon" who drove the chariot of his sun-god father, Helios. (pronounced "fate-un" in the USA "feet-un"" in the United Kingdom) an open car of the classic era for 4 or 5 passengers with a convertible top for inclement weather; protection from the elements was not as good in this body style as in the "all-weather" style or the "Touring Car", which often included optional side-curtains for optimum protection in the foulest of weathers.

PHAETON - (Carriage teminology) The word comes from Greek mythology. Phaethon was the son of Helios, who drove the Chariot of the Sun so recklessly that Zeus, fearing he would set the earth on fire, struck him down with a bolt of thunder. The first known use of the term to identify a carriage comes from 1735 when the French applied it during a period when it was much in vogue to use such classical pseudonyms. The term spread rapidly to England and then America.

The term is generally applied to four wheel vehicles that are a bit lighter than standard carriages. Generally, the body is a single piece and can be either for two or four passengers. There is no specific driving seat; for this would be an owner-driven vehicle that was considered to be sporty. Berkebile concludes his description of the vehicle by saying: "Usage of the term became so general and loose toward the end of the era, that often there was little distinction between certain phaetons and a carriage bearing some other name."

PICKING-OUT (Br.) - a molding color in contrast to a body color

PIPING - an upholstery trimming stitched along edges, generally of seats and seat backs; cloth and leather were used.

PLEATS and PIPES - a style of upholstering where material is folded or separated by stitched seams.

PLYMETL - trade name for a metal-faced plywood product used in commercial vehicle and bus bodies made by the Haskelite Manufacturing Corporation of Chicago, Illinois. "Plymetl side paneling is stronger than any sheet metal of the same weight, lighter than than any sheet metal of equal strength. The paneling is attractive because the stretcher-leveled steel faces of Plymetl have no distorting highlights, and the specifically prepared surface of the steel face takes and retains fine finishes."

PONTOON FENDERS - a generic name for the bulbous fenders that were popular in the forties; coined by US automobile designer Brooks Stevens in the early fifties these appeared as a single ovoid shape, sometimes running back into the front door, with only a semi-circular opening for the wheel.

PONTOP - a DuPont coated fabric trade name. This one applied to a line of surface-coated top materials for open and convertible cars as well as for closed car top decking. The earlier Rayntite product line was apparently merged into this product line by the early 1920's.

POULTRY BUS - A purpose-built or modified truck or bus used to carry poultry cages.

PROFESSIONAL CARS - Ambulances, Flower Cars, Funeral Vehicles, Hearses and Limousines are all considered to be Professional Cars. With

few exceptions, hearse and ambulance bodies were sold by coach-builders and not chassis builders. While Cadillac offered a commercial chassis specially built for those purposes, and published literature on same every year, this was more of an effort due to the prestige and high visibility associated with funeral cars than anything; and commercial chassis sales themselves were always a small percentage of Cadillac production. It was the coach-builders who handled marketing of professional cars, and that's why the proper terminology for them lists the car by coach-builder before mentioning the chassis builder, such as a Superior-Cadillac rather than a Cadillac-Superior. Hearses and ambulances were a market in their own right where chassis builders only worked with the coach-builders to provide what they needed in most cases. Some hearses are more collectible than others because of who built them or how the car differed from other coaches. Years ago, a distinctive hearse was a matter of pride to many funeral directors, and it's not uncommon for people to prefer one make of professional car over another. Every brand of coachwork had its advantages and disadvantages; this affected a buyer's decision as to what make of coach they bought. There's a lot more to hearses than meets the average person's eye.

PULLMAN - The name Pullman alone is suggestive of the noble character of the new VIP limousine: In the mid-19th Century the American industrialist George Mortimer Pullman from Chicago (Illinois) made a name for himself by building particularly luxurious railway cars. Since then the name "Pullman" has stood for the highest level of comfort on wheels. In 1928 the standard German reference work "Kraftfahrer und Kraftfahrzeug" defined the Pullman limousine as a "large, comfortable touring and VIP car with a partition between the driver's seat and passenger compartment".

PYRALIN - Transparent synthetic material used to make roll-up windows in woody wagons during the 1920s and 1930s. Held up much better than ISINGLASS, and was far more resistant to yellowing, scratching and cracking. Developed by DuPont, Pyralin was could be tinted and was originally used to make jewelry as well as handles for furniture, vanity sets and silverware and is still used in manufacturing semiconductors.

PYROXYLIN - a cellulose nitrate compound used to coat automotive trim materials for many years up to the 1940's.

QUARTER WINDOW or QUARTER LIGHT- the side window behind the rear door. In very early British usage, the rear window was sometimes counted as a quarter light;

RAYNTITE - DuPont's trade name for their surface-coated, double texture topping, first offered about 1915. By the early 1920's, this product line apparently merged with their top deck material line under the name Pontop.

REPTILE SKIN - used as an upholstery material in some modernistic coach work by Fleetwood and other custom coach builders. Nordberg of Sweden did the interior of a 1929 LaSalle convertible coupe for HRH King Gustaf Adolf of Sweden in reptile.

REXINE (Br.) - British-made nitrite-coated synthetic leathern, used primarily in covering Weymann patent bodies. also see Zapon

ROADSTER - an American term referring to an open body with one wide seat capable of taking tow or three abreast, possibly also having a dickey seat. The American equivalent of the British 2-seater. From the 1930s on it has come to mean the same thing as a 2-seater sports car.

ROI DES BELGES - an ornate tulip phaeton, quite popular in Europe during the early 1900s. The body style was named after the topless limousines favored by King Leopold II of Belgium, the Belgian Monarch who had a much celebrated affair with the notorious Parisian dancer and post card pin-up Cléo de Mérode.

ROLLED BELT - styling term designating the convex-curved molding around the car body level with the base of the windshield.

ROYALITE - a pre-formed vinyl plastic fabric.

RUBBER-COMBINED - a cloth top material construction in which two layers of cloth are put together, or combined, using an intervening rubber film.

RUMBLE-SEAT or DICKEY SEAT - a folding seat in the rear of an open roadster. or convertible coupe body.

RUNABOUT - a very early 2-passenger automobile body style closely resembling a horse-drawn carriage; by adding a demountable "tonneau" behind the front bench, it could be turned into a 4-passenger vehicle.

RUNNING BOARDS - to assist entry and exit from a vehicle a rubber or leather covered metal shelf was run between the front and rear fenders of an automobiles. Cadillac's 1938 "60 Special" model, was the first production car to eliminate them although they were simply hidden behind the doors.

SALAMANCA (Br.) - a style of fast touring TRANSFORMABLE (usually five-passenger) limousine popularized by Rolls-Royce. Named after the the Marquis de Salamanca (Don Carlos de Salamanca), a Spanish nobleman and Rolls-Royce agent who won the Spanish Grand Prix of 1913 in a Silver Ghost.

SALOON - a vehicle with the driving seat inside the enclosed car with no separation from the rear seats.

SCOOP FENDERS - an incredibly unattractive fender that featured forward thrusting front edges and droopy-looking rear edges. Rollston built 4 Duesenberg Model J bodies that included scoop fenders.

SEDANCA de VILLE see TOWN CAR

SHEETING WEAVE - similar in nature to duck weave, yarns alternately go over, then under the intersecting yarns. Sheeting fabrics usually have finer yarns and a more open weave structure than duck weave cloth.

SHOOTING BREAK (Br.) or SHOOTING BRAKE (Br.) - a station wagon, in Britain a break (station wagon) used for hunting or shooting, hence shooting break or shooting brake. A British dictionary gives the definition of "brake" as "a kind of vehicle - see break". The definition for "break" as a noun reads "a large wagonette: a carriage used in breaking horses."

SILENTBLOC - a system of fabric body production in the manner of Weymann. See WEYMANN

SKIFF or CAB-SKIFF - an open sports car with streamlined, light bodywork

SONNENLAND - the well-known "original German" cloth top material (also known by the name Happich) produced by Rode and Schwalenberg GmbH since 1972. In about thirty years of making Sonnenland, product evolution resulted in several variations within this line, most of which remain available or in production. Sonnenland almost invariably consists of a mostly, or all-acrylic exterior cloth, rubber-combined with the well-known dobby-weave (criss-cross pattern) inner cloth.

SPEAKING TUBE: an early one-way intercom system used in chauffeur-driven automobiles that allowed the rear compartment passenger to communicate with the driver. The system consisted of a portable mouthpiece in the rear that was connected via a long tube to a fixed, trumpet-shaped listening device mounted near the driver's ear. The system was eventually electrified with a microphone replacing the rear compartment mouthpiece and a speaker replacing the trumpet. Also see AUTOPHONE

SPLASH APRON - sheet metal panel concealing the chassis frame members typically located above and usually supporting the running boards.

SPLASHERS - early wire-framed, leather-covered fenders were sometimes known as splashers because their primary function was to keep mud from splashing up on the highly polished finish. also see SPLASH APRON

SPORTIF - a very tight or narrow phaeton. Used by Locomobile among others.

SPORT COUPE - a closed coupe with a cloth top and sometimes landau irons resembling a convertible.

SPORT TOPPING - the high-style cloth toppings that came into use in the 1920s for the sportier convertible and open bodied cars. Sport topping became synonymous with convertible topping in general, both cloth and vinyl, through the 1950's.

STATION WAGON - a utility car built of wood, typically with four doors.

STAYFAST - an acrylic-faced colorfast cloth top material produced by Haartz since the late 1970's.

STEP PLATES - flat castings mounted laterally in lieu of full-length running boards on sporty body

types to assist entry and exit; these became popular in 1930. There were also small flat, rear-bumper and fender steps allowing access to auxiliary, fold-away seating in the trunk or "rumble" area.

STRANGLER (Br.) - a carburetor choke

STREAMLINING - in automobile body construction, unifying uncoordinated body elements into a whole and giving a shape intended to reduce to the greatest extent possible the turbulence caused by the automobile penetrating the air at speed.

STYLING - the term describes the marriage of art and technology and is attributed to Harley Earl's Art and Color Department which produced the 1927 La Salle for General Motors. Interiors of the luxury sedans, limousines and town cars, however, tended towards the baroque and it was to be a few more years before a conscious effort was made by the new auto stylists to match interior designs to exterior styling themes and colors.

SUBURBAN - a seven passenger limousine

SUICIDE DOOR- a door hinged at the back and opening at the front, aka rear-hinged door, typically for the front seat. At speed any chance opening would cause the door to whip backward with great force. However, there were sound reasons for the practice. On long chassis of the day - with engines mounted further back than is now usually the case - the front edge of the front door came close to the center of the wheelbase, at a point where the chassis was most flexible. Hinging the door at this area could produce considerable distortion and develop unwanted rattles and squeaks.

SUPERLEGGERA (It.) - super light

SURREY - a body style from the early 1900s that replaced the tonneau with a full width rear seat and entrance from both sides (no doors).

SYLENTLYTE – concocted from the words "silent" and "light." Sylentlyte was a thin-walled aluminum casting system developed by William Brokaw and Thomas Hibbard of Hibbard & Darrin for use in building automobile bodies. For a four-door convertible, 10 main Alpax castings were used to form the body structure which was topped off with a convertible top that featured hollow metal bows instead of the heavier wooden ones. Four-door sedan bodies used the open car's 10 castings mated to a separately cast roof assembly that bolted to it. Alpax was an aluminum alloy used by the Montupet Foundry that was widely used in France for pistons and other highly stressed cast aluminum parts.

Since most large European and American cars of the late 1920s were similar in size, a single set of castings, with minor alterations, could be fitted to all of them by using a sandwich of long wooden shims. Aluminum sheet stock was used to cover the exposed shims prior to mounting the bodies.

In the March, 1930 S.A.E. Journal Hibbard related (note: this piece was written before the market crash):

"My own firm has been working for some time on all-:-metal bodies and has two types of construction well developed and adaptable to fairly small production. In one type of body we make the doors with a cast aluminum-alloy frame covered with a sheet-aluminum panel, and build up the cowl and rear panels in the same way. In the other type we cast the entire exterior of the door in one piece and build up the other panels from castings. This last method is in some respects preferable but requires exceptional foundry facilities, alloys considerably lighter than the ordinary casting -alloys and very difficult pattern work.

"Our models are designed around a panel construction stopping at the belt, as a great proportion of our bodies are collapsible. The roofs of bodies having solid roofs are separate structures. We find our metal bodies lighter, stronger, more easily reparable and much less sensitive to climatic variations than bodies built over wooden frames.

There was considerable interest in the trade, and Hibbard & Darrin leased a showroom on 57th Street in New York to promote the idea to American coachbuilders and manufacturers. Unfortunately the showroom opened a few weeks before the 1929 market crash and hopes of licensing the system in the US vanished almost overnight. Additionally the benefits of the system - lightweight, rust-proof and rattle-free – couldn't outweigh its many problems. Each cowl and front door assembly had to be hand-made in order to match the many different lengths and brands of chassis and the molds needed to form the panels

were very difficult to make and the resulting castings were often seriously flawed. The biggest problem was that the bodies were very expensive to make and after a handful were built, Hibbard & Darrin closed down the Sylentlyte production line in 1929.

The Sylentlyte system was not the first time cast-aluminum was used for auto bodies. From 1910-1919 Pierce-Arrow built all of their bodies using cast aluminum body panels affixed to a wooden frame.

TALLY HO - early 20th century name for a bus, typically used by resorts and hotels. Horse-drawn pleasure vehicles in the late 1800s also used the term.

TEAL - DuPont offered a line of rubber-combined cloth top materials under the Teal trade name in the late 1920's and1930's. The occurrence of this trade name in automotive trim specifications will be evident if the word “teal” seems to contradict an adjacent color name (i.e. “weatherproof top of gray teal cloth”).

TENDELET (Fr.) - a protective cover that could be placed over the rumble area of 2-passenger roadsters, coupes and convertible coupes.

TENITE - a hard plastic material used in the manufacture of steering wheels, transmission and signal control knobs.

TEISSEIRE - a c.1920 French patent for convertible bodies which featured soft fabric-tops with 2-piece folding windows.

THERMOSOTE - a tar-impregnated wood fibre insulation board manufactured by the Agasote Millboard Co.

THREE POSITION COUPE - A Coupe De Ville which may be presented as a fully closed coupe, a deVille Coupe with the front section open or a fully collapsible convertible.

TONNEAU - plural, TONNEAUX (Fr.)

[1] - the rear compartment of a car body, usually an open touring body.

[2] - (meaning detachable) - a removable passenger compartment that offered additional seating for two or more passengers and was mounted at the rear of a body behind the front seats. It comprised a single door at the rear and was available on "Runabout" models during the 1900s. In later cars, the TONNEAU was the passenger area behind the front seat; the term also may describe the piece of cowling sometimes installed behind the front seat to protect the occupants of the rear compartment; the second cowl could be raised to facilitate entry to and exit from the rear seat.

[3] Derivation: originally a French word meaning a barrel; a wooden vessel formed of staves and hoops and made to contain a TONNEAU (1,000 kilogrammes) of oil. Later, a horse-drawn carriage, known in England as a governess car, having a rear entrance. A similar type of body was first applied to a motor car by M. Huillier, of Paris, and by reason of its resemblance to a barrel and to the horse-drawn TONNEAU already existing, was known as a TONNEAU.

TONNEAU COVER - a soft, fabric envelope (later made of rigid fiberglass) to hide the unsightly soft top frame and material when in the folded position. Some post-war manufacturers featured sliding or folding metal panels under which the folded soft top disappeared completely out of sight.

TONNEAU WINDSHIELD - an auxiliary windshield mounted to the TONNEAU and which, in general, could be folded forward, flat against the TONNEAU to let the "air in your hair". Some coachbuilders offered a TONNEAU windshield that could be lowered into the partition between the front and rear seats.

TOP BOWS - the cross beams of folding framework of a convertible top that supports the cloth, leather or rubber top and keep the top tight when in a closed position. Formerly made of hardwood, they soon where manufactured of metal.

TORPEDO (Fr.) - an very smooth touring car without horizontal moldings. The French equivalent of Phaeton. Also a long sports vehicle with hood, which was attached to the windscreen.

TOURER (Br.) - the British equivalent of a Touring car or Phaeton

TOURING or TOURING CAR - an early body style designating an open car accommodating at least 4 persons; fitted with a folding top (and occasionally waterproof side curtains) for use in inclement weather; more generally, a large family-

sized convertible automobile with 4 doors and a seating capacity for 5 to 7 passengers.

TOWN CABRIOLET - A town car in which the covered rear section converts to an open car.

TOWN CAR - generally a chauffeur-driven automobile with an open front compartment and, sometimes, a metal or makeshift leather covering to protect the chauffeur in inclement weather. The passenger compartment, separated from the driver by a fixed or mobile glass division, usually had exceptionally luxurious appointments. Many town cars had a "speaking-tube" mounted on the "B" pillar, the outlet of which stood close to the left ear of the driver; the driver's seat and front door panels of most town cars were finished in fine grain black leather; a waterproof foul-weather cover was stored in a special compartment in the division, behind the front seat; it could be pulled out and buttoned on the windshield to protect the driver. Also known as a SEDANCA de VILLE or TOWN BROUGHAM.

TRAM - A wagon typically pulled by a tractor, usually with more than one wagon connected together. Some streetcars, trolleys and trolley busses are erroneously referred to as trams.

TRANSFORMABLE (Fr.) a four door convertible with windows - see ALL-WEATHER. Some early examples were built using the Baehr patent - see BAEHR PATENT.

TRANSFORMABLE TOWN CAR - see Town Cabriolet

TRUNK and TRUNK RACK - until the mid-30s most cars were fitted with a folding luggage rack at the rear on which was strapped a removable trunk; in the 30's there was a move toward a fixed trunk rack and trunk in which fitted luggage could be carried. The first integral trunk made its appearance on the 1938 Cadillac Series 60 Special sedan.

TUDOR SEDAN - Ford's term for a two door.

TULIP BACK (Br.) - a Panel Brougham or Coupe deVille (very early type) with quarter panels and rear body panels that flare outward at the top to a flat sharp edged roof line. Also, an early vehicle whose Tonneau is shaped like the body of a tulip.

TULIP PANEL - body panel between bottom of rear window and rear of trunk lid.

TULIP PHAETON - an early vehicle whose Tonneau is shaped like the body of a tulip.

TULIP STYLE - see TULIP BACK

TURRET-TOP - the solid pressed-steel top used by General Motors and introduced on the closed body Cadillac and LaSalle models of 1934.

TWIN SIX - Packard's first twelve cylinder car introduced in late 1915 and produced until 1920. When the new V12 was reintroduced by Packard in 1932, the term was reused for that first year only.

UNDERSLUNG - an automobile whose frame passed underneath the axles. Used primarily by the American Motor Company of Indianapolis from 1907 to 1914

VANA - another patented body-building process where a chicken-mesh wire frame is affixed to standard wooden body framing, then covered in a synthetic concrete mastic much as a mason towels on concrete. When dry, the material was sanded and painted much the same way that modern body filler is used. Similar to the Kenneth L. Childs patents, although his bodies were covered in padded Nitrite-based fabric, rather than the vegetal concrete used by the Vana process.

VESTIBULE SEDAN - a closed body style with an arched rear compartment door extending into the roofline. The high door allowed distinguished owners to enter and exit the vehicle without removing their hats. Popular from the early teens through the early twenties.

VICTORIA - a close coupled two door sedan or an enlarged coupe with a rear seat also knmown as an OPERA COUPE. Also a four door open car with folding top over the rear seat only. Known in France as a COUPE MILORD.

VINTAGE - formerly a term describing cars built between 1915 and 1925 but now used broadly, especially in England, to include cars manufactured between 1920 and 1942.

VOITURE (Fr.) - French for car

VOITURETTE (Fr.) - an early touring car with two seats only and no hood.

WAIST-LINE see BELT-LINE

WIESE CLOTH - William Wiese & Co. was a New York City supplier and importer of automotive upholstery and trimmings. The were a major supplier of Bedford Cord and some of the broadcloth imported by the firm became known in the trade as "Wiese Cloth".

WELT or SEAMING - a feature of upholstery work consisting of a double-edge, strip, insert or seam; a fabric or leather covered cord used to separate or outline a section of a cushion or back-rest.

WEYMANN - developed by Charles T. Weymann and patented in 1922, it consisted of a nitrile coated fabric (typically ZAPON or MERITAS) that was stretched over an ash frame that was fastened together by small strips of perforated steel plate. The body was incredibly light and the metal strips prevented the wood from rubbing together and squeaking (a major problem with many coachbuilt bodies).

WHEEL DISCS see DISC WHEELS

WINDLACE - the fabric or leather covered, spongy piping or "wind hose" applied around doors to prevent drafts.

WINDOW REVEALS - the frame around the body side windows, which could be chrome-plated or painted a lighter color to make them stand out.

WINDOW STRAP - a strap attached to the base of a window which passed inside the body up to the sill and into the interior of the car. It could be used to pull the window up. Holes in the strap could be buckled against an interior pin to hold the window at various elevations.

WINDSCREEN (Br.) - windshield

WINDSHIELDS - the windshields of early cars were a flat, one-piece of glass set vertically in the "A" pillars; as styling became the order of the day in the twenties there was a move towards "V"-shaped, two-piece windshields, for better air penetration, then back to a flat configuration raked back at a sometimes steep angle, cutting down wind noise and improving even more the penetration factor. Shaped glass was introduced gradually after WWII and reached their epitome in the late fifties when there was such a vast expanse of windshield, back light and side glass to make some General Motors and Chrysler detractors refer to them as "rolling greenhouses".

WING (Br.) - fender

WINTER FRONT - a patented name for a shuttered radiator cover by the Pines Co. which could be opened and closed to regulate engine temperature.

WIRE WHEELS - Wire wheels made their appearance almost at the same time as the wooden so-called "artillery" wheel but they were an expensive option; hub and rim were connected with cross-laced steel spokes; after the war the wire wheel made a comeback on 1950s Cadillacs, Lincolns and Packards.

WOODGRAINING - the art of giving an imitation wood finish to metal surfaces. The Di-Noc company of Cleveland held a patent on their woodgraining process which was referred to as Di Noc.

WOODY - a motor vehicle incorporating natural finished wood for structure and all exposed parts of the body. The term has been loosely applied to any car which uses wood on the exterior.

ZAPON - an artificial leather produced by a company of the same name in New Jersey from the mid-teens through the 1930’s. Zapon may be best known for the artificial leather they made for fabric skinned car bodies of the 1920’s, particularly those built by Weymann.

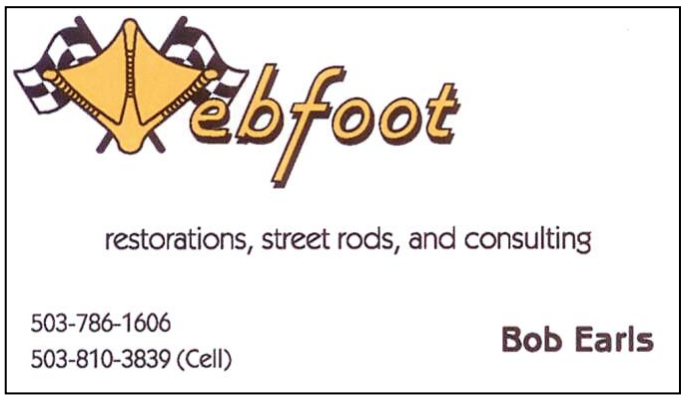
For more information please read:

- www.haartz.com
- Cyril R. Brooks - Trimming Motor Vehicles - Spon & Chamberlain, 1934
- George J. Mercer and R.P. Williams - Motor Body Designing Problems, Ware Bros. 1931
- R.B. Birge & Hugh M. Sargent - Practical Problems for Vehicle Draftsmen and Mechanics - Ware Bros., 1912
- Albert T. Innis - Coach & Motor Trimming - C. Lockwood and Son, 1932
- Vehicle Trimming: A Compilation of articles on the Trimming of Automobiles, Motor Trucks, Carriages and Wagons. Ware Bros., 1913
- Kingston Forbes, M.E. - The Principles of Automotive Body Design, Ware Bros., 1922
- J. Dewar McLintock - Modern Coach and Motor Trimming - Technical Press, 1951
- G. Mortimer - Coach: Automobile Trimming Part 1 - International Ideas, 1970
- J.R. Whipple - Evaluation of Automobile Body Design - SAE, 1963
- C.W. Terry - Practical Motor Body Building - E. & F.N. Spon, 1921
- Robert W.A. Brewer - Motor Car Construction - C. Lockwood and Son, 1928
- Frank Xavier Morio - Automobile Pattern Drafting - U..P.C., 1922
- Elkanah Herman Brill - Automobile Body Drafting and Sheet Metal Stamping
- Frederick E. Hoadley - Automobile Design Techniques and Design Modeling: the Men, the Methods, the Materials
- Ian Beattie - The Complete Book of Automobile Body Design - Foulis/Haynes, 1973
- Biographies of Prominent Carriage Draftsmen - Carriage Monthly, April 1904
- Marian Suman-Hreblay - Dictionary of World Coachbuilders and Car Stylists
- Daniel D. Hutchins - Wheels Across America: Carriage Art & Craftsmanship


MONTE SHELTON
JAGUAR
tel 503.224.3232
tel 800.803.7138
fax 503.224.4310
1638 West Burnside
Portland, OR 97209
MONTE SHELTON
mshelton@monteshelton.com
JAGUAR


– COMPLETE LINE OF FILTERS –
HYDRAULIC HOSE & FITTINGS – LUBRICATION EQUIP.
HIGH PERFORMANCE PRODUCTS
HOURS: MON – FRI 7:30-5:00
SAT 8:00-12:00
Oil Filter SERVICE CO.
Bus. 503/232-5126
Bus. 888/232-5126
Fax. 503/232-5170
615 S.E. MARKET ST. PORTLAND, OR 97214
www.oilfilterserviceco.com


COLDWELL BANKER
BARBARA SUE
SEAL
PROPERTIES
PREMIER OFFICE
MILLION DOLLAR
cbseal.com
RON ERICKSON
Broker
DIRECT 503.699.3962
FAX 503.241.5566
EMAIL ronerickson@cbseal.com
www.cbseal.com/ronerickson
4200 SW Mercantile Drive
Suite 700
Lake Oswego, OR 97035
OFFICE 503.241.7325


ebfoot
restorations, street rods, and consulting
503-786-1606
503-810-3839 (Cell)
Bob Earls


• INSURANCE COLLISION REPAIR • HIGH QUALITY RESTORATION • HOT RODS·CLASSICS
BILL HALL
Body & Frame
www.billhallbodyandframe.com
503-257-9991
12735 N.E. WHITAKER WAY • PORTLAND, OR 97230
MAILING ADDRESS: P.O. BOX 20756 • PORTLAND, OR 97294


GUY'S
INTERIOR RESTORATIONS
FULL SERVICE AUTO UPHOLSTERY
AWARD WINNING INTERIOR RESTORATION
GUY RECORDON
503/224-8657
gir431@hotmail.com
2016 NE Alberta St.
Portland, OR 97211

VISIT YOUR CHRYSLER DEALER TODAY! It's open-house at Chrysler dealers all over the land... and it's the most popular "open-house" on motor car row.

America is flocking to see and drive Chrysler's Two New Beauties for 1938. And Chrysler dealers—leading merchants in every community—are reporting that interest in Chrysler is tops for all time.

And it's no wonder! The Chrysler Royal sweeps on in the low-priced field. Wheelbase increased to 119 inches! New Gold Seal engine increased to 95 fighting horsepower. Comfort and beauty increased to Chrysler's topmost standards.

A front end you'll study with delight! Smart fenders, headlamps and high, proud radiator ... in a unified grouping. A low-swung side view, impressive in its greater length and size.

You'll applaud the interior ... for roominess and taste. Richly styled new instrument panel! New wheel with ring-type horn control! Deep, wide, chair-high seats ... custom-type upholstery.

Airflow principle of springing and weight distribution ... Aero Hydraulic Shock Absorbers ... independently sprung front wheels.

Safety *All-Steel* Bodies ... hydraulic brakes. Chrysler's best in engineering and building!

The Chrysler Royal is *more for the money!* See it today ... at your Chrysler dealer's.

A Great New Imperial

THE NEW IMPERIAL attracts admiring thousands with smart new beauty ... completely wins them with phenomenal performance.

A great new Gold Seal engine of 110 horsepower ... trigger-quick with dual carburetion ... silky-smooth with Floating Power.

Beauty to match this magnificent power! Long, low, road-hugging beauty outside...smart, tailor-made styling within.

The roominess you've always wanted ... made possible by the long 125-inch wheelbase ... the skill of Chrysler body engineers.

Better engineered ... so it rides better ... on any kind of road. Airflow principle of springing and weight distribution ... direct acting Aero Hydraulic Shock Absorbers ... slow recoil springs.

Safety *All-Steel* Bodies ... hydraulic brakes ... silent synchronized gear shifting ... finger-touch steering.

Phenomenal performance! Remarkable price! Learn about both from your Chrysler dealer.

Chrysler Sweeps On
IN THE LOW-PRICED FIELD!

★ ★ ★

☆ **NEW 1938 ROYAL** ... 95 horsepower, 119-inch wheelbase. Ten body types.

☆ **NEW 1938 IMPERIAL** ... 110 horsepower, 125-inch wheelbase. Six body types.

☆ **NEW 1938 CUSTOM IMPERIAL** ... 130 horsepower, 144-inch wheelbase. Three body types.

Tune in on Major Bowes, Columbia Network, every Thursday, 9 to 10:00 P.M., E.S.T.