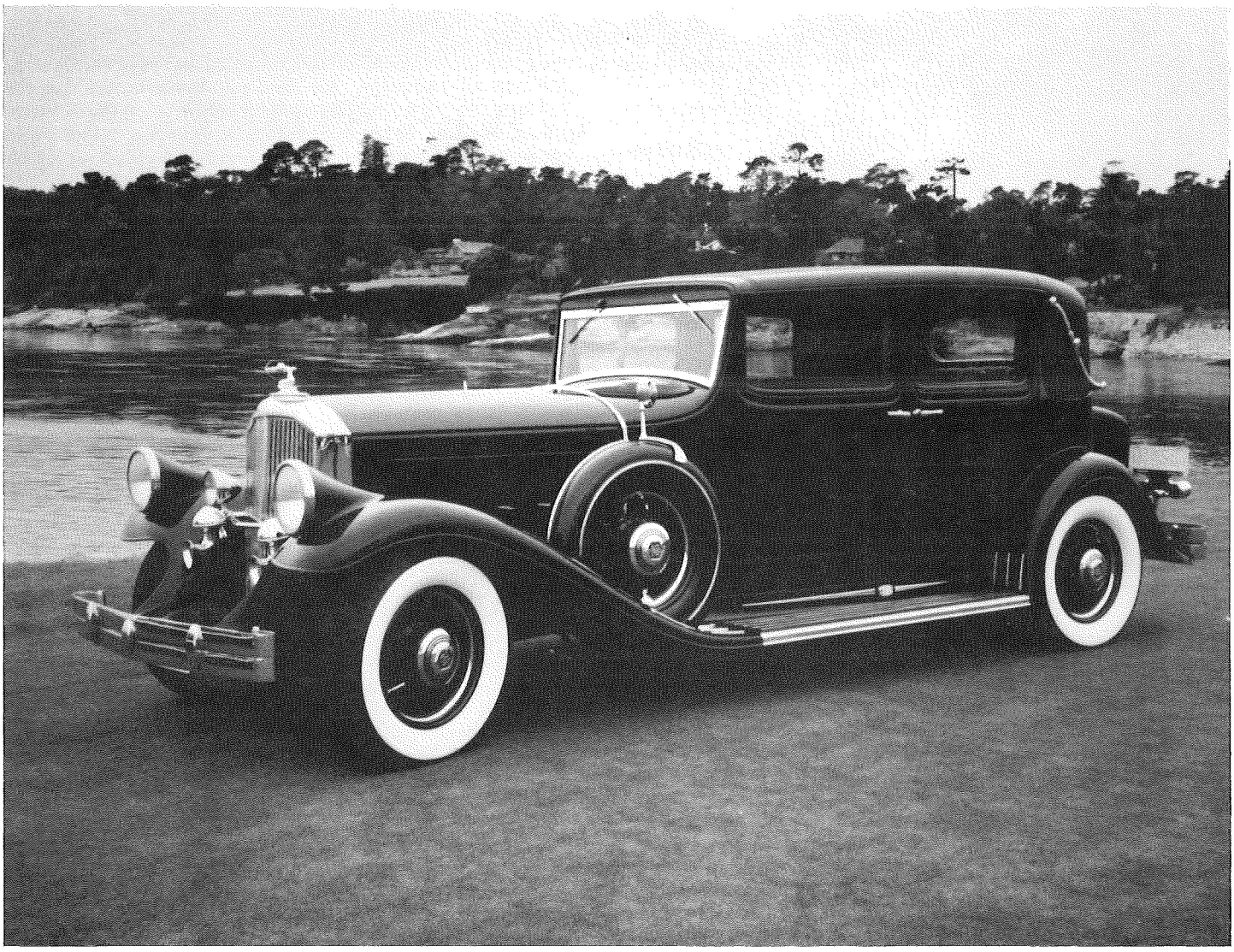
BUMPER GUARDIAN



1932 PIERCE ARROW 12 52 CUSTOM CLUB BERLINE

Gerald Schimke

NOVEMBER – DECEMBER 1991

PACIFIC NORTHWEST REGION
CCCA

BUMPER GUARDIAN

Pacific Northwest Region,
Classic Car Club of America

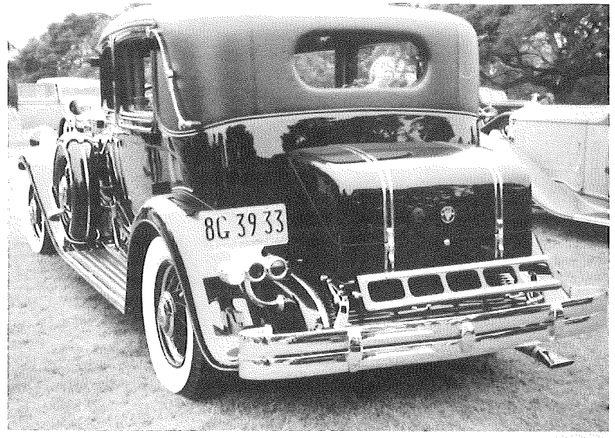
The Bumper Guardian is the official publication of the Pacific Northwest Region, Classic Car Club of America. The region was granted a charter in 1963. *The Bumper Guardian* is published every two months: Jan. / Feb., March / April, May / June, July / Aug., Sept. / Oct., Nov. / Dec.

The Bumper Guardian is the official publication of the Pacific Northwest Region, Classic Car Club of America.

Editor is Ron Doss, 19109 N.E. 151st, Woodinville, WA 98072, (206) 881-8794.

Advertising Manager is Shirley Starr, 1619 - 168th Ave. N.E., Bellevue, WA 98006, (206) 562-7122.

Production is handled by Sunset Press.



COVER STORY...

Gerald Schimke's 1932 Pierce-Arrow V-12

RKO Radio Pictures Company owned a 1932 Pierce-Arrow V-12 until the company was liquidated during 1955–57. There were a number of lawsuits against RKO and Howard Hughes, who had 100% ownership of the studio at that time, many of which were suits by ex-RKO stockholders. Somehow in the process of settling the lawsuits, making the sale of company assets, and the eventual breakup of RKO the car was given to one of the attorneys as a partial payment of his fees.

After an accident during the 1960s the car was partially dismantled and restoration was started during the early 1970s. When the current owner purchased the car in 1989 the headlight glass and other parts were still wrapped in 1973 Los Angeles newspaper. The restoration had not gone beyond a protective paint, interior wood refinishing, and purchasing a few of the missing parts.

The RKO Pierce-Arrow is a Custom Club Berline (short coupled sedan with divider window and leather top). It is believed to be the only Pierce-Arrow Berline body style from the 1930–38 period in existence. Its delivered price in 1932 was about $5,000.

The Pierce-Arrow Company introduced the V-12 engine in 1932. Two hundred of the large V-12 engines were built that year. LeBaron or Brunn custom bodies were put on about 40 of the Pierce V-12 chassis and Pierce built about the same number of its own custom formal bodies (Enclosed Drive Limousines and Club Berlines) for the V-12. Of all of these, only the RKO car has survived. There are only five other 1932 examples of the large V-12 cars extant. (Club sedans, sedans, coupes.)

The car has mechanical brakes, the Startix automatic starting system, dual carburetors, Synchro-Mesh Free Wheel selective three-speed transmission, firm to soft dash board controlled shock absorbers, and automatic vertical radiator shutters. The V-12 engine displaced 429 cubic inches and generates 150 horsepower. The interior is very luxuriously appointed: window mouldings of genuine walnut, dictaphone, "his" and "hers" vanity cabinets with automatic lighting and accessories, window shades, down filled rear seat and back cushion, elaborate upholstery stitching, a steering column controlled radio, and heater. The chassis is a 142 inch wheelbase.

RKO was a very popular studio and had many well known stars and directors from 1932 to the mid-1950s. Most likely the car was used as an executive or VIP car. It may have been in one or more movies. Is it one of the cars in Citizen Kane? Celebrities associated with RKO include: Selznick, Hughes, Orson Welles, Katharine Hepburn, John Barrymore, Irene Dunne, Joel McCrea, John Wayne, Johnny Weismuller, Jane Russell, Ginger Rogers, Fred Astaire, Loretta Young, Cary Grant, Gary Cooper, James Stewart, and Douglas Fairbanks, Jr. Notable RKO movies from this period were: King Kong, Citizen Kane, The Outlaw, and Notorious. RKO distributed Disney's Snow White and the Seven Dwarfs.

Continued on page two

Calendar Of Events

JAN. 9–11 National Annual Meeting, St. Louis.

FEB. 20 Bellevue Exhibition – Adatto /Kane / Rittenhouse

MAR. 28 Coming Out Party at Design Center – Mounger / McMichael

Welcome... New Members

1992 New Members PNWR CCCA

Greenfield, Giles	Spouse: Banny
Heffron, J. Patrick	Spouse: Catherine
Johnson, Gary K.	Spouse: Joyce
Mueller, H.A.	
McKenzie, Bob	Spouse: Irene

Pierce-Arrow

Continued from Inside Cover

By the end of World War II the car would have been of little or no value, other than as a "period" car.

Murray Motor Car of Woodinville, Washington, did the restoration work. Cedardale Upholstery of Mt. Vernon did the upholstery and the leather top.

The car was shown for the first time at the 1991 Pebble Beach Concours d'Elegance where it was awarded a First Place. The following week it was entered in the National Pierce-Arrow Society meet and won The Venderveer Trophy for The Best of Show.

During restoration the goal was to make the car as much like original as possible. The outside color was a problem. The car is black and viceroy maroon. The maroon is so dark that most of the time the car appears to be totally black. Achieving this shade of maroon without it turning muddy required many test samples even using the original paint codes. Fortunately an unfaded interior surface with the maroon color was available for a match.

The key to reproducing the luxury and look of the original interior was the selection of the upholstery fabric. After several months of sample gathering from auto fabric suppliers all over the country, only one possibility had been found. The color was only marginally acceptable. Another six weeks was set aside for the continued search. In Bellevue a fabric supplier to the commercial airplane industry was found which had many colors and shades of colors. It was also able to provide the correct carpet and the trim leather. The interior was again virtually as when it was new.

The running boards were among the most difficult parts of the car to restore. The rubber mat as well as the inlaid chrome strips had to be individually created. Each of the several rubber sections were tapered from front to back and the inside one, in addition, had a lengthwise curve.

Surprisingly, the tires almost proved impossible to duplicate. Many sources were contacted in the effort to buy dual whitewalls that were not the very wide whitewall style since Pierce had not used them. Only one brand was identified that had the "right" tire. A set was ordered with the promise there would be come manufactured in the spring of 1991 to fill out the order. With only a couple of months left to finish the car, it was still short one tire. The manufacturer had decided to not make that style for another year or two. After much discussion they offered the showroom floor model at headquarters.

The most surprising aspect of the engine rebuild involved the carburetors. Though both were with the car the plan was to buy an additional one to get the best two assembled out of the three. Efforts to locate the correct carb uncovered the fact that this model is one of the most rare today, not one has been available through the industry and specialty shops for almost ten years, and that a rebuilt pair would cost about $10,000. Restorers have offered that amount and still haven't been able to locate any. The carburetors were carefully repaired.

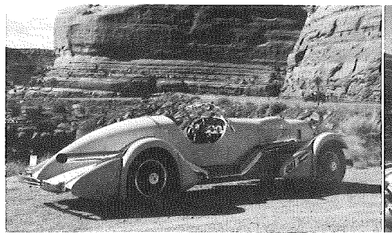
For convenience and safety the car has been fitted with directional signal lights. Additional authentic tail light buckets have been added, which serve as additional tail lights and brake lights, as well as the directional lights, and the original front parking lamps have been rewired to also serve as directional lights.

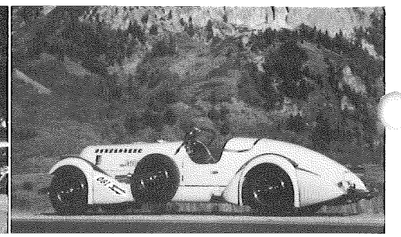
During the RKO owenrship the company affixed a medallion on the trunk which has the same logo used at the end of the credits on RKO movies and which was painted on the sides of RKO working vehicles such as pickup trucks. This medallion has been reattached.

It is planned to introduce the car to the northwest at the club's "Coming Out Party" in March and then put in a couple of shows in the region next summer.

"I don't remember a Packard ever being recalled."

NOTE: The Bumper Guardian *takes pride in the fact that there is something of interest for everybody. There are a few well placed mistkaes in this newsletter for those individuals who are continually searching for and pointing out the errors of others.*





Doing "The Grand" In Style

By Glenn E. Mounger

What do you do when you own a Classic that has won its CCCA Junior, Senior, and Premier First Place awards; its AACA National First plus numerous Concours d'Elegances? What do you do if said pristine Classic happens to be very valuable? How about if this very same Classic has a very well-known race hsitory . . . like setting the *international speed record. What do you do? . . . Put the car is a glass box in your living room? Sell it? Keep trailering it to shows? Naaah! You take it racing again!!!

And that's just what owner, Knox Kershaw, and I did with his 1935 Duesenberg SJ, "The Mormon Meteor", in a fabulous event called the Colorado Grand, September 17–20, 1991. The Colorado Grand is a 1000+ mile spirited tour of the scenic state of Colorado (for racing and sports cars of distinction built prior to 1960) and the mid-September dates were designed to take full advantage of the lovely fall colors and lack of tourists on the road.

Knox had taken every precaution prior to the Grand to insure that the Duesenberg was up to the test. He and restorer Rick Hamlin even went so far as to take the car to the CCCA Denver, Colorado Grand Classic in July (where it won First in the Premier Division) just so he could test-drive it at the high altitudes in the Rockies.

And perform it did!! We travelled over 1,173 miles with chilly mountain passes up to 12,095 ft. elevation and hot basin floors – sometimes running at speeds over rugged terrain that would make Ab Jenkins sit up and take notice.

When all was said and done, Knox proved two things in my mind:

First, the Mormon Meteor has long been recognized as one of the most significant Duesenbergs in the world (AUTOMOBILE MAGAZINE, November 1991 called it "The world's finest motor car . . ."). Now it will be known as one of the best running / driving Duesy's as well.

Second, it is a hell of a lot more fun to drive them than to look at them!

**NOTE: As "The Duesenberg Special", Ab Jenkins drove this car to average 135.57 for 24 hours and 153.97 for one hour on the Bonneville Salt Flats in Utah to set international Class B (5 to 8 liters engine capacity) records on August 31, 1935.*

"Phantom" Tour to Vancouver BC - Not An Illusion

None of those starting out that Friday-the-13th morning dared to feel confident that the lovely weather would prove to be a prelude to three uniformly marvelous days for our Vancouver, BC weekend Theatre / Garage Tour; but so it was to be.

Things began when eight Classics gathered in Lynnwood, Washington at 10:00 a.m. to caravan to the Georgian Court Hotel. U.S. Tour Leader / Organizer, Bill Deibel and Karel, were followed by Ron and Gayle Doss, Dick and Carole Reddaway, Bob and Kathy Reverman and Ed and Pam Rittenhouse. Also joining "modern" were Gerry and Doreen Greenfield, Norm Herstein and son in a scout car and friends of Reddaways, Norm and Louise Lehman.

The big concern that morning was where to cross the border in light of the Canadian Customs and Immigration "slow down" then in effect. Opinion was not unanimous. Two fast twelve cylinder Lincoln Conkanuncles, the scout car and the Lehmans made all haste for Blaine and crossed without delay. The others after caususing during a pit stop in Bellingham, proceded much more "classically" and followed their tour leader into Canada from Lynden, also without encountering any backup. These folks did encounter a problem after entering Vancouver when the tour leader drove on ignoring his stragglers (in a Franklin and a Packard) who were then left to take their own special private tour of the city before joining everyone else at the small, elegant Georgian Court Hotel, well in time for a cocktail reception and delicious dinner prior to walking the two blocks for attendance at the performance of Andrew Lloyd Webber's production of "Phantom of the Opera" held in the Queen Elizabeth Theatre.

Cocktails are enjoyed Friday by Al McEwan, Koko Carlson and Kathy Reverman as Conrad Wouters pays less than full attention to the serious comments of Norm Herstein.

Bill Deibel assists John Carlson in signing check for Friday's dinner while Rob McCallum, Koko carlson and Betty and Vic Houghton look on.

Joining the group that evening were our hosts and organizers for the reception and dinner and all Saturday and Sunday activities, John and Koko Carlson as well as CCCA members Gordon and Claudia Apker, Tom and Susan Armstrong, Fred and Brenda Bonin, Carl and Chris Bomstead, Stan and Valerie Dickison, Jerry and Jo Anne McAuliffe, John and Kay McGary, Brent and Connie McKinley, Terry and Barbara McMichael, Roy and Terry Magnuson, Hal Meden and Joan Royal, Alfred and Helgard Opp, Bernie and Ruth Ratzlaff, Al and Shirley Scholes, Conrad and Pam Wouters, Lee and Marlene Zuker, and National Association of Antique Automobile Clubs of Canada friends and guests Vic and Betty Houghton, Nigel and Edna Leedham, Jim and Marcia Ratsoy, and Cliff and Pam Roe.

Next day we toured from our lodgings, first to the magnificent home of Joe and Jean Mitchell to enjoy a wonderful poolside brunch and a leisurely browse through the Mitchells' extensive car and automobilia collection which is oriented toward General Motors products and includes several fine classics. Leaving Mitchells' we toured to the immaculate new musuem and restoration shop owned by Jim and Marcia Ratsoy which has on display what seemed like at least 100 cars with an emphasis on early V8 Fords, but which also includes several classics among examples of many other marques.

From there we toured to the picturesque commercial fishing village of Steveston which is fast developing into a pleasant tourist stop with antique and gift shops and many eateries featuring seafoods. Here we were free to roam around and, on our own, find our way to the Coquitlam Motor Inn to check in for the evening.

Despite the excitement already experienced, no one was quite prepared for the treat that awaited us Saturday evening when we all convened at the breathtaking new home of John and Koko Carlson in Belcarra Village with its spectacular

At Joe Mitchell's from left are Bob Reverman, Gerry Greenfield, Bill Holt, John Carlson, Jerry McAuliffe, Joe Mitchell, Dana Meronuk, Dave Meronuk and Bob McKenzie.

Stan Dickison (right) gives his views to Vic Houghton amidst Jim Ratsoy's extensive collection.

commanding view overlooking Bedwell Bay off the Indian Arm of Burrard Inlet. Here the Carlsons presented us with a catered, delicious Ukranian dinner followed by a "Classic Fashion Show" in which men's and women's fashions from the beginning to the end of the classic period were modeled. The apparel was all from the private collection of Ivan Sayers who produced and emceed the show. Of course during the refreshment hour we wandered through John's garages enjoying his eclectic collection stretching from early Fords to his '68 Camaro SS coupe in which he set A-Stock standing ¼ mile world records back to back in 1968 and 1969.

On Saturday we were joined by additional CCCA members Paul Bonin, Pete Gagan, and Bill and Liz Holt as well as additional NAAACCC members Vern Bethel, Gary and Carol Bradley, Bob and Sharon Brewer, John and Joan Doerksen, Arnie and Pat Elchuk, Len Esser and spouse, Keith and Judy Evans, Mike Franke and spouse, Ed and Vi Hepner, Koko Carlson's mother Katai, Rob and Mimi McCallum, Bob and Irene McKenzie, Dave and Dana Meronuk, Sandy and Wendy Morita, Ron and Pat Morris, Craig and Sandra Reitchel, Jim and Elaine Riederer, Gary Russell, Earl and June Tucker, Ed Wasney and spouse and Dave Waters. These folks along with the Magnusons added 17 more classics for a total of 25 driven to the event (not including those only on display at the garage stops).

But on Sunday morning we were still far, far from the conclusion of this "super-weekend" as we proceeded first to the home of Paul Bonin where he and son Fred keep his great Packard roadster and Fred's two Auburns along with yet another unique collection of automobilia. From Bonin's we toured to "Wasney's" in New Westminster to see what must be the stateliest, most manicured automobile dismantling "yard" anywhere. Wasney's deals only in parts for Ford products from Continentals to trucks and includes a department dealing only with obsolete Ford parts. In addition Wasney's includes its own wonderful Ford museum which in addition to its many cars and extensive automobilia houses the world's largest collection of enameled Ford signs.

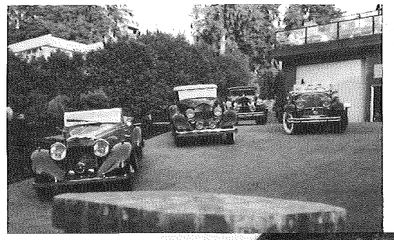
From Wasney's we toured to Westminster Quay, a newly redeveloped section of Vancouver waterfront consisting of a multitude of upscale new condominium complexes and a large public market where among other delights were Cuban cigars for the smugglers amongst us. Here we gathred for one final time to enjoy yet one more delicious meal at Fin's restaurant overlooking the busy Fraser River. Upon concluding lunch much of the group dispersed to go their own ways while the U.S. tour leader and true stalwarts Revermans, Rittenhouses and Solo Al caravaned back (the latter two with tops down) as far as Arlington taking the Queen's Highway to Sumas and there crossing the border and beginning a fine old fashioned Sunday afternoon drive down the very lovely and pastoral Washington Route 9.

"Classic" headaches were minimal over the weekend. Hoopers suffered a broken fuel line, Maddens experienced a maddening ignition problem, and the U.S. tour leader, having spent Thursday evening replacing a leaking fuel pump, made the whole tour badly in need of the tune-up which had been planned for Thursday. Fortunately Bill "Roger Wilco" Mote was on hand to assist in all three of these situations – even taking time out from the happy hour at Carlson's to regap points and plugs on the leader car.

Continued on Page 6

"Phantom" Tour

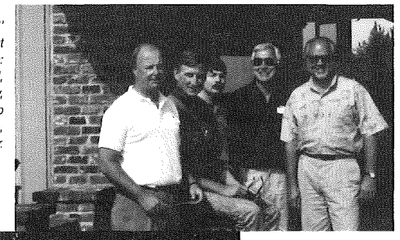
Continued from Page 4



Four "untouchables" at Carlson's

Bill Mote chats with Ron Doss and Ed and Pam Rittenhouse (backs to camera) at Wasney's, Jo Anne McAuliffe in background.

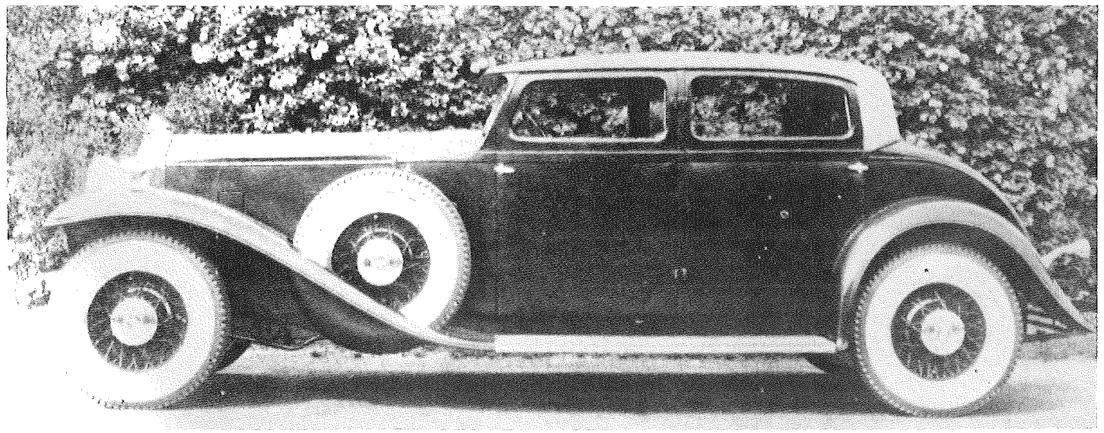
Some of the "Yanks" hanging out at Wasney's: Carl Bomstead, John McGary, Roy Magnuson, Bob "Smiley" Reverman, and Gordon Apker.



"Smiley" and friends at Wasney's - Claudia Apker, Pat Morris, Brenda Bonin, and Edna Leedham.

Continued on Page 13

Weymann Fabric Bodies



DV-54 Weymann Monte Carlo on DV-32 Chassis.

January 1991 the CCCA held its annual meeting in San Franscisco. At that time all attendees had the opportunity to see four or five graceful, gorgeous Stutz Automobiles that were covered in what appeared to be leather. The colors were rich and the overall effect was very different form what we were accustomed to. Why did they do that? What would water do to these pieces of rolling sculpture? The following is edited and reprinted from "Car Classics" 12/75 Weymann Fabric Bodies by David H. Ross, and intended to pass on the valuable information found therein. — Ed.

In 1922, few closed cars were made in Europe, and these were mainly formal, chauffeur-driven cars. Even though the European manufacturer made and sold only the chassis, so that the choice of body style was entirely the customer's, few sedans and coupes were built. In this country too, the sales of open cars — of touring cars, phaetons and roadsters — far outnumbered those of coupes and sedans. There was a valid reason.

In Europe most cars were in the luxury class and the chassis were built on long wheelbases.

With a few exceptions (and they were not mass produced), chassis of both European and American makes featured frames with side railmembers constructed of simple steel channels joined by three or four tubular or channeled cross members. Box section side rail members had not yet been developed. Because of the long wheelbases, longitudinal rigidity was often lacking. To gain this rigidity there were such extremes as Marmon's frame with channels 10 inches deep. Some European marques even resorted to tie-rods, under the side rail members, with *turnbuckles* to take the strain out of the frames in the unloaded condition.

With solid or tubular axles front and rear, and suspension by leaf springs, *torsional* rigidity was something else. Usually it just wasn't there. (In 1922 the so called "X" cross frame and the "K" cross member at the front of the chassi frame had not yet appeared.)

As a result, automobile bodies were subjected to strains which their design and construction were unable to accept over a protracted period of time. Bear in mind this was before the introduction of the all-steel welded body. Typical construction - whether a low cost production body, or an expensive, hand crafted custom body - featured metal panels attached to a wood frame (with mortised,

Continued on Page 9

Weymann Fabric Bodies

Continued From Page 7

lapped and glued joints) resting on a wood sill which was bolted to the chassis. The body contributed little to the longitudinal rigidity of the car and even less to its torsional rigidity.

The chassis would weave as the car rolled over surface irregularities. The bodies were twisted and distorted - so much so that it was not uncommon to have closed doors sprung open. Wood joints loosened and began to squeak. Door frames lost alignment and sagged. Rattles developed. Squeaks and rattles were difficult to account for, even more difficult to pin-point in location, and almost impossible to eliminate. The condition was bad enough in open cars. In closed cars with the added top structure, the condition was even worse. In 1922 the automobile was out of the horseless-carriage stage. Engines had acquired a multiplicity of cylinders and gained in power. Reliability had been developed to the point where, in America at least, the automobile was becoming a vehicle of daily transportation for the masses. But engineering developments in chassis design and body construction had not kept pace with the increase in power and performance. The automobile of 1922 was a far cry from the scientifically balanced and integrated vehicle we know today.

With the introduction of the Weymann fabric bodies in 1922, the first major break with traditional horseless-carriage construction was made.

In time, refinements were introduced which permitted the use of curved surfaces. Square corners were replaced with radii, angular roof lines were rounded. Yet as long as Weymann bodies were before the public - and their production in one country or another spanned a period of seventeen years, until about 1935 - no basic change was made in their construction.

In a Weymann body, the entire frame normally consisted of three transverse parallelograms: one each at the leading edge of the front door, the back of the front door and the back of the rear door, in a four door sedan. If a rear quarter window was desired, a fourth parallelogram was added. Seat backs were not attached to the body frames, but were positioned and supported by adjustable straps which were anchored to the floor. The door frames, as well as the seat frames were separate.

The load represented by the seats and passengers was carried by a floor which mounted directly upon the chassis frame, and thus imposed no stresses upon the bodywork.

The cowl was formed by a sheet of aluminum which was fastened to the chassis frame only at the rear. The body frames were fastened to the chassis by bolts which passed through the lower horizontal members of the parallelograms and the side rail members of the chassis. There were no longitudinal through members, as with a conventional body. The parallelograms were set up separately and bolted to the chassis: the longitudinal pieces were then fastened between them.

The wood frames of the parallelograms, and the longitudinal pieces between them, were joined by metal plates or straps, bolted in such a manner that a small gap remained between the individual members. Thus there was no wood-to-wood contact at any point. Every detail was so arranged that flexing movements could occur in concert with the distortions of the chassis frame without damaging the body structure, and without causing squeaks or rattles.

To prevent distortion of the door frames when the door was open, a diagonal stay of aircraft wire was secured to the forward vertical and bottom frame members. When the door was closed, the wire was not in tension, but it became taut under the weight of the door when it was opened, and took any additional loads which might be imposed.

Door hinges were manganese bronze castings and employed Zapon floating hinge pins. These hinges, in the bodies made in this country, were imported from France. The hinges together with the lock were designed to form a flexible three-point support for the door when it was closed. The door frame did not contact the body frames when closed, being assembled with spacers between it and the body frames. The lock was of such a design that a universal joint effect was obtained, which prevented straining of any part due to frame weave.

The covering material consisted of canvas duck attached to the wood frame. To this was added horse-hair and other suitable padding to give it fullness and contours. A weather-proof fabric covering was then applied and tensioned.

In this country, a weather-proof fabric covering often used was a DuPont product known as "Fabrikoid." An artificial leather, it had a tough, resilient finish with a surface pattern not unlike the "crackle" produced by certain paints today.

In 1926, Clarence Day, a West Coast representative of DuPont located in Los Angeles, had a custom built Cadillac phaeton covered with Fabrikoid - that is to say the body, hood, fenders and all exposed metal-work except the bumpers, radiator shell, door handles and windshield frame were so covered. While this was not a Weymann body, it was the *same covering material* later used on Weymann bodies. To demonstrate the toughness and resiliency of this material, Mr. Day sould scuff his shoe in mud and dirt - or *sand* if any was available - then, with his leg extended, deliberately drag the sole of his shoe down the face of a door panel. Seen for the first time, the act was rather startling to say the least. Whipping out a handkerchief, he would wipe the dust away to show that not a scratch or mark of any kind marred the surface.

The finished Weymann product was a body which was silent, flexible and independent of the chassis. Approximately 600 pounds of weight were eliminated as compared to a conventional body of comparable size. Since the reduction of weight was effected *above* the chassis frame, a lower center of gravity resulted for the car. Oddly enough the question of safety never seems to have been seriously raised. As a matter of fact, the bodies were, because of the flexibility of their construction, highly resilient. They protected the occupants just as a wicker basket protects a fragile article. The strength of the framework was more than enough to support the weight of the entire car if it was overturned. The resiliency of the framework distributed the shock of an impact: in many accidents it was found that only the window, or pane of glass, that was actually struck was shattered.

The bodies could be finished economically, as many were, for installation on lower priced cars. Because of this fact, and because of their freedom from squeaks and rattles, these bodies helped to popularize the use of closed cars in Europe and England. In 1924 fifteen British automobile manufacturers and fourteen coachbuilders took up licenses for the production of Weymann bodies in England.

At the same time, Weymann bodies were mounted on the most expensive chassis of two continents. Through the use of rare woods for interior trim and glove leathers, silk broadcloths or rare mohairs for upholstery material, they could be made as costly as the customer desired. At different times, Weymann bodies were featured on Rolls-Royce, Bentley, Delage, Hispano-Suiza, Minerva, Isotta-Fraschini, Mercedes and other makes in the luxury class. In America they were featured primarily on the Stutz.

In 1926, F.E. Moskovics, president of the Stutz Motor Car company, attended the Paris Salon. The display of Weymann bodies caught his eye almost immediately and excited his interest. The flexibility of their construction in particular appealed to him. His interest led to a meeting with Weymann and a visit to the plant at Levallois where Moskovics observed the work in progress.

Largely as a result of this meeting and upon Moskovics' offer to have a certain percentage of Stutz production fitted with Weymann bodies *if* they could be obtained in this country, Weymann decided to establish a plant in America.

Financing was arranged thorugh an English banking house, and the Weymann American Body Company was incorporated under the laws of Delaware. The old

Continued on Page 10

Weymann Fabric Bodies

Continued From Page 9

National Automobile plant in Indianapolis was acquired. Master craftsmen were brought over from the works in France. In its March 26th issue of 1927, *Automotive Industries*, a weekly trade journal, was able to report "...regular production on a small scale is now underway..."

Weymann had moved fast.

A number of models were made for Stutz which took almost the entire output of the Weymann plant. These included the Monte Carlo coupe, and the Chateau line of sedans: the Versailles, Longchamps and Chaumont which Stutz featured. Because of the nature of their construction, the bodies were built directly on the chassis, which were sent over to the Weymann plant by Stutz.

In May of 1928, G.J. Connolly was named president of the Weymann American Body Company. He went to France and England on an inspection tour of the works in those countries, then took over management of the plant in Indianapolis.

Formerly, Connolly was associated with the Murray Body Corporation, first as chief engineer of their plant in Detroit, later as manager of the Murray plant in Indianapolis. Before that, he had been a body designer with Hupmobile and superintendent of the Hupmobile body plant in Wisconsin. All designing and engineering of the Weymann bodies, however, was done in France.

A few custom bodies wee turned out by the works in Indianapolis, but Stutz continued to take almost the entire output of the plant until Stutz went out of business. Weymann's American Venture did not long survive the downfall of Stutz. In 1935 the plant in Indianapolis was closed.

By 1935 the end was in sight in Europe too. Production of Weymann bodies had ceased, first in France, then in England.

Two factors killed the demand for Weymann bodies, the first was the introduction in Europe, and almost universal use, of cellulose spray paints for automotive finishes. The second was the introduction of the all-steel welded body which Citroen was building in France under an arrangement with the Budd Manufacturing Company in America.

After World War I, and particularly in the '20s, there was a strong leaning in Europe toward American products and customs. When American cars came on the market with their sparkling finish - for cellulose paints were developed and first manufactured in this country - the European public asked for a lustre which was not obtainable on a fabric body.

A Weymann body required little maintenance or attention. And the average owner gave it none. Having a non-metallic surface, it had a *matte* finish which didn't show the dust. Many owners washed the bodies only when they became splattered with mud. A gloss could be given to a Weymann body in much the same manner as a gloss could be given to a pair of shoes, but few owners bothered to do so. As a result the bodies came to be considered shabby in appearance when compared with the new cellulose finishes.

The all steel body produced by the Citroen, of course, did not develop the squeaks and rattles of the composite body. Thus it was in direct competition with the Weymann body which no longer had an "exlcusive" on this feature. While it is doubtful if the all-steel body was as light as the fabric body, it was lighter than the composite body.

Classic Car Club of America - Pacific Northwest Region

Board of Managers and Annual Meeting - November 9, 1991

The meeting was called to order by Director Rittenhouse at 7 pm at the Sandpoint Country Club in Seattle. A preliminary meeting of the Board of Managers was attended by managers Adatto, Bomstead, Deibel, Kane, Mounger, and Reddaway; Past Director Greenfield; Editor McMichael; Secretary Barber; Treasurer Wouters; and Nominees Doss and Magnuson. The minutes of the October 2, 1991 Board meeting were accepted. Secretary Barber reported that nominees Doss, Magnuson and Scheef had been chosen on a majority of the ballots received. The Board declared them elected to fill the expiring terms of Sissy Madden, John McGary, and Ed Rittenhouse. The Board then chose Bill Deibel as Director. Secretary Barber, Treasurer Wouters, and Membership Chairman Mote will remain in those offices. Editor McMichael announced that she was resigning and Ron Doss agreed to assume that office. In other business, Bellevue Show (February '92) Chr. Adatto announced that his Co-chr Madden is moving out of the region and asked for volunteers to replace her. John Kane and Dir. Rittenhouse agreed to do this. Glenn Mounger moved that the Board commend Ed for his service as Director. The Board approved.

At the main meeting, attended by 66 members and guests, the minutes of the previous Annual Meeting were aproved as corrected. The Treasurer reported a balance of $19,570.69.

Car of the Day awards were presented as follows:

EVENT	DATE	CHAIRMAN	WINNER	CAR
Annual Meeting	11/3/90	Bill Deibel	John McGary	1937 Rolls-Royce 25/30 Saloon
Christmas Party	12/16/90	Carl Bomstead	Denny Aker	1932 Auburn 12-160
Coming Out Party	2/23/91	Mounger / McMichael	Dick Goodwin	1941 Lincoln Continental Coupe
Kite Fly	5/18/91	Jack Gofette	Roy Magnuson	1936 Bentley 4¼ L. Special
Bellevue Place	6/15/91	Richard Adatto	Tom Armstrong	1937 Cord Phaeton
Parade	7/4/91	Al McEwan	Hal Meden	1931 Rolls-Royce Park Ward
Canada Tour	9/13–15/91	Bill Deibel	Fred Bonin	1931 Auburn 8 Conv. Sedan
			Al McEwan	1935 Bentley 3½ L. Hooper Tourer

The Dean Spencer Award was presented by Jim Tallman to Marty Anderson for his efforts as a restorer of Classics as a hobby and for sharing his expertise with other hobbyists. The Herb Schoenfeld Award was presented by Glenn Mounger to Gordon Apker (in absentia) for his support of the Classic car hobby and his long service to the Club. Glenn then presented a permanent plaque to the 1990 Schoenfeld Award recipient, Jack Gofette. Previous recipients will receive like plaques at a later date.

The Director announced the board elections and officers as noted above and turned the meeting over to the new Director, Bill Deibel. The membership present gave a round of applause for Ed, and Bill offered thanks to all past and present Board members and officers, and also to his wife and Lee and Marlene Zuker for their assistance in preparing for the Annual Meeting. He also announced that no Classics were driven to the meeting. He asked for comments about making the Annual Meeting an optional black-tie event. He announced that Ron and Gayle Doss would be co-editors.

He then turned the meeting over to "James Hunt, Esq." who posed as a Rolls-Royce representative (but is actually a Boeing Structures Engineering Manager) who gave a humorous talk about an apocryphal new Rolls-Royce 12 cylinder car and concluded with a bit of Royal scatological humor from his British navy days.

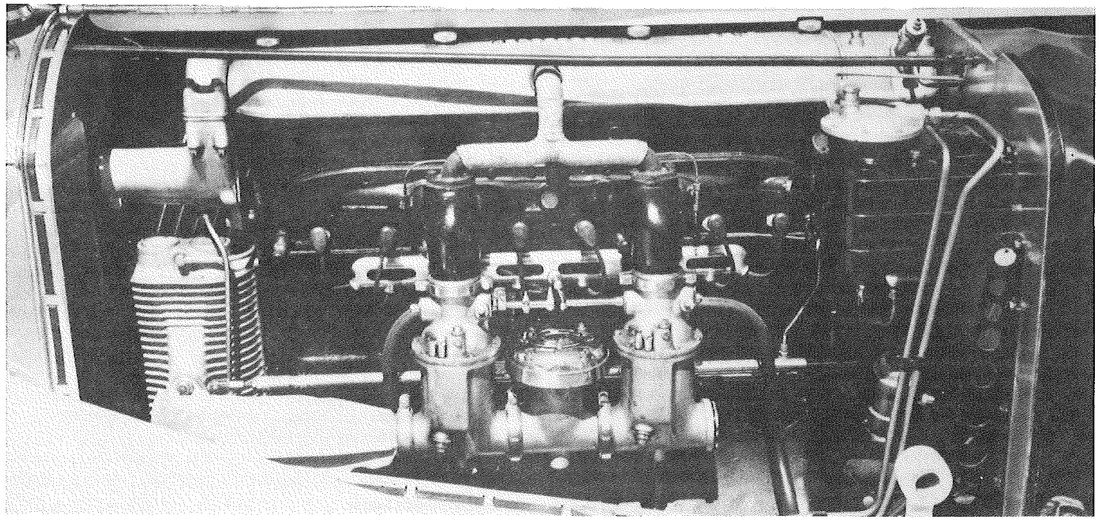
The meeting adjourned at about 11 p.m. The next Board meeting will be December 4 at Latitude 47.

Respectfully submitted,

Ted Barber

Ted Barber,
Secretary, CCCA-PNR

REPRINTED FROM *CAR CLASSICS*, DECEMBER, 1975



Intake side of the Mercedes SSK engine. When the throttles are open, further movement of the accelerator shuts the air intake in between the two carburetors and engages the clutch between the crankshaft and the vertical supercharger. The displacement of the Roots supercharger is greatly in excess of that of the pistons, with the result that the compression is effected inefficiently - and noisily - by a shock front spreading into the blower. Because the supercharger is normally de-clutched, there is no possibility of synchronizing the blower delivery and the cylinder intakes.

SPEED is the Substitute for Cubes

Wonder where the Zephyr went? And all the other engines with many small cylinders?

By Brian W. Firth

Must comparisons of different engines, such as that made by Maurice Hendry in *Car Classics* for October, 1974, rely in the last analysis upon opinion? Is there no measure by which engines can be ranked in order of merit?

We have already seen that there exists a number which measures how well the engine is matched to the wide-speed-range automotive application, namely elasticity ("Torque," *Car Classics*, April, 1974). Given engines with the same power output, then the performance achieved will increase - or the amount of gear changing needed will decrease - as elasticity increases...IF the engines all weigh the same! A good, heavy engine is not better than a bad, light engine in a vehicle which carries its engine with it.

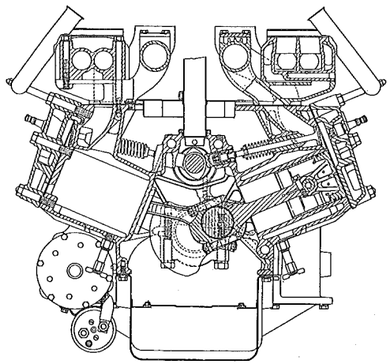
Thus power/weight ratio is a good measure of the excellence of an engine. However, a check in the columns of a reference book will show that this figure is usually available for air-cooled engines, but not for water-cooled ones: the figure is only meaningful for purposes of comparison if the weight is measured for an engine complete with radiator and cooling water, but the weight of these items differs from one installation to the next.

Consequently critics follow Hendry's example and seek a criterion which can be worked out for the basic engine, even though it may not be capable of discriminating between engines of different designs. Hendry suggests that "there is no substitute for cubic inches," that power per unit swept volume is the figure of merit by which engines can be compared.

The Table shows how the engines compared on this basis. The Table has been arranged with the engines in increasing order of the size of the individual cylinders, which ranges from 28 cu. in. in the Cadillac to 81 cu in. for the 8-liter Bently and Hispano engines. The third last and second last columns show the Hendry power and the H.P. per cubic inch. Comparing only the unsupercharged figures, the power/volume varies from 0.49 H.P./cu. in. for the Duesenberg J down to 0.29 H.P./cu. in. for the Hispano six. This last figure gives one pause. The Hispano was an overhead-camshaft engine; how can its performance be bettered by engines with weak, heavy pushrod valve gear? Something else also appears; all the other bad engines, the Phantom II and the Isotta, also fall in the same end of the Table. In fact, the only really good engines at the bottom of the Table are the Bentley sixes - distinguished by having four valves per cylinder and the head cast integral with the cylinder - and the Mercedes 38/250 which was used only in cars which were, to say the least, sporting. Thus it seems that it may be difficult to attain high power/volume from big cylinders.

Let us make an imaginary experiment; let us take an engine and enlarge all the dimensions by a factor of two, and see what transpires. Since the engine will still burn the same air and the same fuel, we expect the mean effective pressure in the cylinder to remain the same. We may now make a guess and say that the engine will reach its maximum power when the air flow over the valve seats reaches the speed of sound; since the ratio of valve size to piston size is the same in the small engine and the large, this will happen at the same piston speed in both cases. Now, by definition, the power is equal to the mean effective pressure times the piston area times the stroke times the rate of rotation. The stroke times the rate of rotation is the piston speed. So that if the mean effective pressure and the piston speed are the same, the power must vary as the piston area.

However, there remains the question whether the large engine will survive if it is run at the same piston speed. The large engine must, presumably, be built of the same materials as the small one, the stresses must be no greater. In the large engine, the mass of the piston will be greater by eight, while the area of the connecting rod will be greater by four; thus the acceleration of the piston



THE ULTIMATE AUTOMOTIVE ENGINE?

For 1937 the cadillac V-16 was re-engined with an L-head engine with the banks at 135°, giving an even firing order and making ample space between the banks for the manifolds, and reducing the height of the engine drastically. The same output of 185 h.p. was achieved with 21 cubic inches less displacement, and with a decrease in weight of 250 lb. The short-stroke proportions of this very modern engine resulted in it exhibiting the same power per cubic inch as the Marmon V-16 and the Bentley sixes, although it was very lightly loaded and tuned to give its maximum at a piston speed well under 2000 ft./min.

Continued on Page 12

HOW THEY COMPARED

ENGINE	Bore	Stroke	Cyl. No.	Piston area sq. in	Swept volume cu. in. (ltr)	Maximum R.P.M.	Piston Speed	Mean effective pressure lb./sq. in.	Hendry Power	Power/volume H.p./cu. in.	Specific Power
Cadillac	3¼	3¼	16	133	431	3600	1950	95	185	0.41	1.4
Marmon	3 1/8	4	16	123	491	3400	2270	95	200	0.41	1.65
Packard	3 7/16	4	12	111	446	3400	2270	89	170	0.38	1.55
Lincoln KB	3 1/8	4½	12	92	414	3400	2550	98	175	0.42	1.9
R-R Phanton III	3¼	4½	12	100	448 (7.34)	3500?	2620?	83?	165	0.37	1.6
Mercedes 500K	3 3/8	4¼	8	71½	307 (5.02)	3400	2410	76/120	100/160	0.33/.52	1.4/2.2
Pierce-Arrow	3½	4	12	115	462	3400	2270	90	180	0.39	1.56
Stutz DV-32	3 3/8	4½	8	71½	322	3900	2920	95	150	0.47	2.1
Hispano	100	100	12	146	575 (9.4)	3000	1970	87	190	0.33	1.33
Duesenberg	3 3/4	4 3/4	8	88½	418	4200	3320	93	205	0.49	2.3
Isotta 8B	95	130	8	88	448 (7.34)	3000	2560	83	140	0.31	1.6
Bentley Speed Six	100	140	6	73	403 (6.6)	3500	3220	90	160	0.396	1.6
Mercedes 38/250	100	150	6	73	432 (7.1)	3200	3140	91/115	160/200	0.37/.46	2.2/2.7
R-R Phantom II Continental	4¼	5½	6	85	468 (7.7)	2750	2520	89	145	0.31	1.7
Hispano	110	140	6	88½	487 (7.98)	2600	2390	91	145	0.29	1.65
Bentley	110	140	6	88½	487 (7.98)	3500	3220	88	190	0.39	2.15

SPEED / CUBES

Continued from Page 11

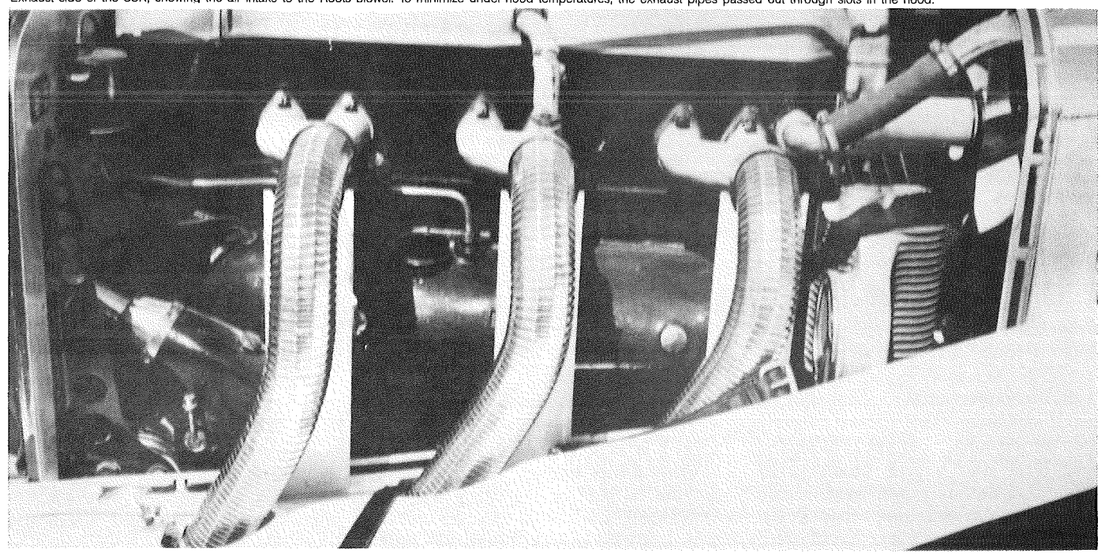
must be reduced by a factor of two. The acceleration of a point travelling in a circle is given by the square of the speed divided by the radius; thus keeping the piston speed the same and doubling the stroke will have the acceleration, so that the engine will have the same stress levels. Our imaginary experiment shows, then, that power varies as piston area, so that increasing the stroke merely reduces the power per cubic inch. The weight of the engine varies as its volume, so that the power/weight figure falls off in the same proportion as the power/volume figure.

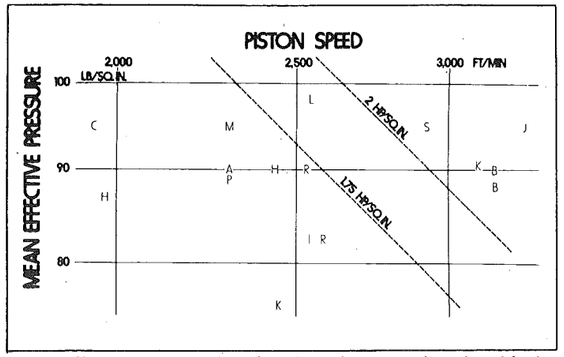
Let us now return to the Table and see how the engines compare on a basis of power per unit piston area, the specific power shown in the last column. One thing that appears at once is that the Stutz is not a small engine, it is closely the same size as the 6½ Bentley and the Mercedes 38/250; similarly, the Duesneberg J is as large as the Bentley and Hispano 8-liter engines. And no longer are the outputs of the Stutz and the Duesenberg unrivalled, they are shared with the other overhead-camshaft, four-valve-per-cylinder engines. At the other extreme, the poorest performer is now the Hispano V-12, which is hardly surprising since it has push-rod valve gear. If anything, there is a tendency for specific power to fall off at the small sizes, but this can be explained; the small cylinder sizes were found on very ambitious luxury cars, for which refinement rather than performance was important.

But we are still far from having clarified all the problems. On this analysis, large cylinders should be inferior to small ones; we should expect to see engines with cylinders just large enough to be convenient to work on, and the larger cars should have more numerous cylinders. But we see nothing of the sort - instead of multitudinous cylinders being used where power/weight is most important, they are used where it is least important. Hendry's cars are designed for Total Performance, reliability and refinement are given weight with power: we know that W.O. Bentley designed a V-12 for Lagonda, but it was intended to run in top gear on fast and slow roads alike, we know that Bugatti built cars intended predominantly to achieve high performance on a continent spanned by fast highways and used eight-cylinder engines. Apparently there is a way of achieving high power/weight figures other than using many small cylinders.

Continued on Page 14

Exhaust side of the SSK, showing the air intake to the Roots blower. To minimize under-hood temperatures, the exhaust pipes passed out through slots in the hood.





Mean effective pressure plotted against piston speed on logarithmic axes: (A) Pierce-Arrow. (B) Bentley. (C) Cadillac. (H) Hispano-Suiza. (I) Isotta-Fraschini. (J) Duesenberg. (K) Mercedes [unsupercharged rating]. (L) Lincoln. (M) Marmon. (P) Packard. (R) Rolls-Royce. (S) Stutz.

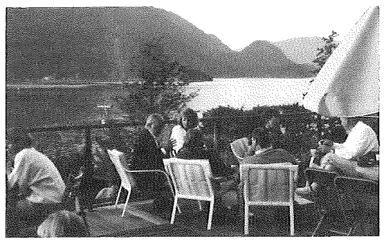
IMAGINARY ENGINES

	Original Engine.	Scaled-up Engine.	Big-bore, short-stroke Engine.
Bore	B	2B	2B
Stroke	S	2S	S
Piston area	1	4	4
Swept volume	1	8	4
Mean effective pressure	1	1	1
Piston speed	1	1	1
Rate of rotation	1	½	1
Power	1	4	4
Power/volume	1	½	1
Specific power	1	1	1
Wall thickness	1	2	2
Crank diameter	1	2	2
Weight	1	8	4
Power/weight	1	½	1
Bearing loading	1	1	2

NOTES: The engine speed at maximum power is often quoted only in round numbers, so that piston speed and mean effective pressure are not exactly known. the speed for the Phantom III is no more than an estimate. It appears implausible that the Duesenberg J could have developed 205 h.p. at less than 4200 r.p.m. It can be seen that all the overhead-camshaft engines, except the heavily supercharged Mercedes 500K and the boulevard-optimized Hispano six, fall on the high speed side of the 2 h.p./sq. in. contour. All the push-rod engines fall on the low pressure side of the 1.75 h.p./sq. in. contour: the Marmon is exceptional in having a mean effective pressure rivaling those of the L-head engines.

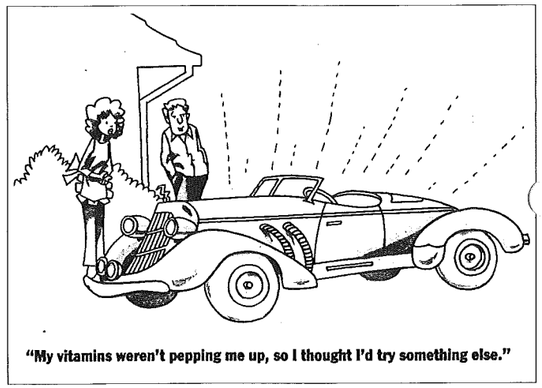
"Phantom" Tour

Continued from Page 6



Gordon Apker relates some important matters to Gayle & Ron Doss (backs to camera) and Chris Bomstead while Claudi Apker chats with other guests on Carlson's waterfront deck.

In concluding this report, no amount of credit can be too great for John and Koko Carlson who organized this entire event from the U.S. tour leader's original concept and theatre plans to their many Canadian helpmates.



"My vitamins weren't pepping me up, so I thought I'd try something else."

SPEED / CUBES

Continued from Page 12

When W.O. Bentley went from the Speed Six to the 8-litre, he did not add two more cylinders. Nor did he scale up the engine, keeping the same proportions, and reduce the rate of rotation. He increased the bore alone, and kept the rate of rotation, and, of course, the piston speed the same. Let us investigate the effect of this change on our imaginary engine.

The third column shows a big-bore, short-stroke version; there is no difficulty in seeing that the power will be four times that of the original engine, and both the power/volume and specific power will be the same. What happens to the weight? To keep the stresses the same, the thickness of the cylinder wall must be doubled, so the weight of the cylinders will increase by four. The length of the crankshaft would go up by two, and the loads by four, so that the bending moment would go up by eight. But for a given bending moment the stress varies as the third power of the size; thus a shaft of twice the diameter will have the same stresses. But this does not mean that the weight of the crankshaft will go up by eight, because the stroke has not been doubled: in fact, a shaft with bigger diameters for the same stroke will be inherently stiffer, the main journals and the crankpins will overlap more. Thus the weight of the whole engine will increase by much less than eight, and bearing in mind that large parts can be made more accurately than small ones, we may expect that the weight increase will be little more than four times. Thus the power/weight figure will have fallen off, but only slightly.

If this is true, then cubic inches can be traded for piston speed; one can raise the power/volume figure simply by going to a shorter stroke and raising the rate of rotation. Reducing the stroke reduces the weight - why is this not done by the designers?

One reason is shown in the comparison. The capacity of a sliding bearing is a function of pressure times speed; if the bore is increased and the rate of rotation kept the same, the speed of the bearing increases although the pressure remains the same. Thus the short-stroke engine burns up bearings. Another thing which is likely to overheat is the piston; the area exposed to hot gas has increased by four, but that in contact with the cooled cylinder only by two. And it must be remembered that the engine is intended for an automobile; the speed of the wheels is fixed by the tire size, an increase in the rate of rotation of the engine means more gearing and more difficulty keeping the shafts out of instability.

The performance of a bearing is dominated by the clearance, which is the very small difference between the shaft size and the bearing size. Fitters work to one-half or, perhaps, one-quarter of a thousandth of an inch: the clearance can be controlled more accurately in a large bearing than a small one. Thus this theory suggests that a large engine can indeed have the same rate of rotation as a small one, and the same number of cylinders: the heavier loading on the bearings and the piston are met by the more refined design possible in larger sizes.

This then explains the direction which engine development has taken. No longer do large cars have twelve or sixteen cylinders - such numbers are found only in engines designed for racing (where power/volume is the *sine qua non*, because maximum volume is fixed) or in sports cars selling in competition with road versions of racing cars: the Ferrari, Lamborghini, and Jaguar are none of them particularly large engines. instead, large engines have the same number of cylinders as small ones - eight - and attain the same power/weight figures by more exacting engineering. Conversely, small engines do not stay with eight cylinders and take advantage of the small cylinder volume, they go down to six or even four cylinders.

It seems, then, that we have shown how and why Hendry's engines compare, and we have also shown why today's engines have evolved along a quite different path. Let us sum up the conclusions we have reached:

I. Specific power, power per unit piston area, is the same in similar engines: specific power is the criterion of merit which ranks engines of different sizes in order of merit.

II. Power per unit swept volume is higher in small cylinders: it does not vary greatly, however, because engines with high/power volume run at exceedingly high rates and engines with low powet/volume are excessively heavy.

III. Large engines will be disproportionately heavy unless they have either a large number of cylinders or a short stroke and heavy thermal loading.

The Auction

by Al Murray

The day after Halloween, shortly after noon, my traveling partner Hank and I found Ed Rittenhouse and Al McEwan at Sea-Tac waiting for the same flight to Las Vegas. As we waited for our connecting flight in San Francisco, the pilot announced a slight delay to check out a warning light that refused to go out. Five hours later we were finally in the air. We arrived at the Aladdin too late to preview the cars. At the check-in counter we ran into Bud and Marilyn Melby. The evening was still early enough to see a couple of lounge shows and lose a few bucks in the casino.

We woke up early Saturday to get registered for bidding and preview the cars. The cars to be auctioned on stage were set up for viewing in a parking lot near the back of the theatre. The sun was shining brilliantly, it was too warm for jackets. Luckily the auction started late which gave us extra time to view the cars. The cars were parked in alphabetical order the same way they were to cross the block.

My main mission of the weekend was to photograph and document the 1902 Murray Motor Car. I shot two rolls of film and took notes and measurements. This car appears to be the last produced of the six Murrays left know to exist. I also photographed a Stoddard Dayton Limo for a friend in Edmonds.

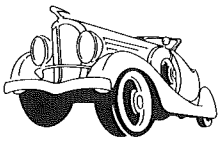
The cars started rolling across the block at 11:30. One of the first series of cars was Gordon Apkers AMX which sold for $8,750. A few more cars down the line Tom Crook bought an Auburn. Don and Arlene Wohlwend and Virgil and Deborah Parker were in the spectator section recording all the action. Fritz Gechter was patiently waiting for the two Horch and Maybach to cross.

In the Expo Arena Ken McBride had his eye on an Issota Fraschini fresh from Pebble Beach. The Expo cars were displayed beautifully in the Aladdin Grand Ball Room. Sixty-eight fantastic automobiles proudly displayed starting asking prices ranging from $125,000 to $15,000,000. All types of exotics from a brass era 6-70 Thomas Flyer, to American and European Classics, to a Corvette General Motors show car and a very unusual Plymouth Asimmetrica concept car based on a Valiant platform. This room was breathtaking. Of the 68 cars only two were sold during the two days. A D Type short nose Jaguar race car sold for $1,000,000 against a $1,200,000 asking price. An Isotta Fraschini was also sold. The Isotta's were the last cars auctioned Saturday.

Time to go play. Al, Ed, Hank and I headed over to the Imperial Palace for an excellent dinner and quick view of their collection. It was nice to see Fritz's old Maybach again. The Duesenberg Room was most impressive. Out of 30 or so on display, we all couldn't decide which one to take home. Off we rushed to get to the Tropicana for the huge Follies show.

Sunday greeted us with the same fine weather. Back to the Auction. Sales seemed spotty. The no reserved cars caused the most excitement with a guaranteed sale. A few bargains were out there, most were sold for good fair prices. The reserved cars sold when reserves were dropped fetching fair prices. A couple of good bargains were made here when the reserve was dropped after the car was out of site and sold to the last bidder. I thought that only a dozen or so cars I saw sold, were sold for reserve price or above. It was hard to tell what actual reserves were. Sunday afternoon the pace picked up but the bidders were gone. Very few of the Rolls-Royces sold. The last few dozen cars were just plain dead. That is, until the final car roared on stage. The 1962 Ferrari GTO was displayed in the Expo Showroom and was the final car to be auctioned off. Bidding started at $4,000,000 and ended at $5;500,000, sold to a European collector.

We had to hustle off to our plane and say goodbye to Las Vegas. Several events every year top the list of places to be: Pebble Beach for the show, Hershey for the Parts, the Great Race for driving and put "The Auction" as the auction of the year. A very exquisite collection of cars for every type of collector. Cars you just don't see very often. If you want one bad enough you might even have a chance to acquire your dream car.



BUMPER GUARDIAN
19109 N.E. 151st, Woodinville, WA 98072

Address Correction Requested

BULK RATE
U.S. Postage
PAID
WOODINVILLE, WA
PERMIT NO.
64

THIRD CLASS MAIL

Alan W. McEwan
4420 Bonnybrae Dr.
Bellevue, WA 98004