

### Contents

- 3 PRESIDENT'S PERSPECTIVE
- 4 MERCEDES-BENZ: VERGANGENE TRÄUME VON MORGEN (PART II)
- 7 ACADEMIC "AUTOPHOBIA": A BRIEF RESPONSE
- 8 ART, ARCHITECTURE AND THE AUTOMOBILE (PART III)
- 12 BOOK REVIEWS
- 15 THE MYSTERY PHOTO(S)

#### Ballboard

**An Offering:** Specialty magazines from the library of SAH Founder and Friend of Automotive History *Keith Marvin* (1924-2009). Offered to the membership in his memory.

None of these are complete runs. Please "order" by lot. They are offered gratis, with shipping paid by the customer.

Stutz News: 23 issues 2000-2007 The Packard Cormorant: 89 issues 1985-2006

Cormorant News Bulletin: 85 issues, 1995-2006

Automotive Fine Arts Society Quarterly: 28 issues, Premiere issue 1988 to 2004. Contact *Kit Foster*, kit@kitfoster.com, cell/text 860-608-4505 for shipping estimates. First claimed, first served.

An Offering: George Tesar (#165) sends this message: "I want to let SAH members know that I have a collection of automotive sales literature, automotive magazines, and some technical literature suitable for a library concerned with automotive history. I also have a large collection of early electric vehicle literature, mostly from 1970s to mid-1980s, suitable for electric vehicle archives. I would like to donate both collections, together or

separately, to a university library or automotive museum with some sort of research facilities." George can be reached via email at gtesar@chorus.net.

**SAH Forum:** This internet platform is a way for members to post messages (text and images) to which others could see, enjoy, and reply. It is also a method to post questions and requests. What's more, the reach of the platform extends beyond the SAH membership—since it's a dedicated forum within the AACA site. Please take a moment to visit the forum, go to https:// forums.aaca.org/ and scroll down just past the first AACA subjects and you will find a dedicated forum named The Society of Automotive Historians then click on that forum and you'll see the posts that are already there. You could read them, but to reply or start a new post you just sign up on the forum's home page (at the address above). The SAH now has its own forum within a community of automotive enthusiasts that will help foster a great level of interaction to promote automotive history.

**Wanted:** Contributors! The SAH Journal invites contributors for articles and book reviews. (A book reviewer that can read Japanese is currently needed.) Please contact the editor directly. Thank you!

Front and back covers: Inspired by the photo of the Franklin Mint model of the 1907 Thomas NY-Paris race car in the article by *David O. Lyon* (bottom of p. 10), here is the actual car as seen at the 2019 Pebble Beach Concours d'Elegance. It was listed as the "1907 Thomas Flyer 35 New York to Paris Race Car, National Automobile Museum (The Harrah Collection), Reno, Nevada" for display. The Thomas was an honor marque with its own class where this car ("B-01") was one of five listed in the program, which also included an article on Thomas on pp. 148-153 by *Evan Ide*.

#### **Submission Deadlines:**

 Deadline:
 12/1
 2/1
 4/1
 6/1
 8/1
 10/1

 Issue:
 Jan/Feb
 Mar/Apr
 May/Jun
 Jul/Aug
 Sep/Oct
 Nov/Dec

 Mailed:
 1/31
 3/31
 5/31
 7/31
 9/30
 11/30

<u>Note</u>: the SAH Journal is a bimonthly publication (printed 6 times a year) and there is a two-month horizon for submitted material before it is mailed (e.g., material submitted by February 1st appears in the Mar/Apr issue and is mailed on or before 3/31.) All letters, manuscripts, and advertisement submissions and inquiries go to the editor.



ISSUE 305 • July/August 2020

THE SOCIETY OF AUTOMOTIVE HISTORIANS, INC. An Affiliate of the American Historical Association



#### Officers

H. Donald Capps Robert G. Barr Robert Casey Rubén L. Verdés President Vice President Secretary Treasurer

#### **Board of Directors**

Louis F. Fourie (ex-officio)  $\Delta$  Bob Elton † Kevin Kirbitz # Carla R. Lesh † Chris Lezotte  $\Delta$  John A. Marino # Casey Maxon  $\Delta$  John Mohr # Dean Nelson † Steve Purdy  $\Delta$ 

Terms through October (#) 2020, (†) 2021, and (Δ) 2022

#### Editor

Rubén L. Verdés 7491 N. Federal Hwy., Ste. C5337 Boca Raton, FL 33487-1625 USA journal@autohistory.org sahjournal@live.com tel: +1.561.866.5010

#### **Publications Committee**

Thomas S. Jakups, Chair Louis F. Fourie Christopher G. Foster John Heitmann Donald J. Keefe Rubén L. Verdés Steve Wilson

SAH Journal (ISSN 1057-1973) is published six times a year by The Society of Automotive Historians, Inc. Subscription is by membership in the Society.

Membership dues are \$50 per year (\$60 per year outside North America & Mexico); digital membership dues are \$20. Dues and changes of address go to:

Society of Automotive Historians, Inc. c/o Cornerstone Registration Ltd.
P.O. Box 1715

Maple Grove, MN 55311-6715 USA

©2020

The Society of Automotive Historians, Inc.

#### www.autohistory.org

Join, renew and more right on-line!

## President's Perspective

mong the great many things that have A fallen through the cracks as a result of the COVID-19 pandemic is that 2020 marked a century and quarter of motor sport. Although there are those who point to the Concours des Voitures sans Chevaux, organized by Le Petit Journal of July 1894, that covered the roughly 125 kilometers from Paris to Rouen as the first automobile race, it was actually what would more or less evolve into a reliability trial, speed being but one of a number of criteria that determined the recipient of the 5,000-franc first prize. The distinction of the first automotive contest to be judged by the simple criteria of the voitures (automobiles) competing—the first automobile covering the distance in the shortest time was the winner-was held in June 1895. It was held over a route of 1,200 kilometers, the starting point being the Place de l'Etoile in Paris, then to Bordeaux, with a return to Paris. The first car to complete the event did so in 48 hours 48 minutes, a Panhard et Levassor with M. Levassor doing much of the driving. However, the rules stipulated that the automobiles had to carry more than two passengers and, therefore, the Peugeot of M. Koechlin, finishing exactly 11 hours later, pocketed the prize money for first place.

If motor sport as a speed contest or race got its start in France, it was the United States that held the next several automobile races. In the summer of 1895, the Times-Herald of Chicago announced plans for an event similar to the Paris-Bordeaux-Paris contest, the race to cover a route from Chicago to Waukegan and then return to Chicago. The original idea was floated for an event on the Fourth of July, but that was deemed impractical and a date in early November, Saturday the 2nd, was selected. Although there was an enormous number of entries, when November 2nd rolled around, few were actually ready, with only two of that handful ready and willing to compete. As a result, the race was postponed until Thanksgiving Day, Thursday the 28th. Meanwhile, for a consolation prize of \$500 rather than the \$2,000 being offered to the winner, the two cars did attempt the run to Waukegan as an exhibition event, the Benz winning by default when the Duryea was

forced off the road by a farm wagon and damaged, preventing it from continuing in the event.

On Thanksgiving Day the Times-Herald event took place, and the course was changed to go from Chicago to Evanston and back to Chicago. The additional weeks did boost the number of starters; however, of the 31 "moto cycles"—a term that soon gave way to the one being used by the Frenchassigned numbers for the event, only six made it to the starting point. The race was held in the aftermath of a major snow storm that hit the city on Monday. The weather on Thursday was cold, the temperatures generally hovering around the freezing point. Of those six departing for Evanston, only two managed to complete the just over 54 miles of the event. A Duryea won with the Benz that "won" the November 2nd exhibition event in second place.

In 1896, there were two race meetings in the United States as well as two in France. The first of the American races was held on Decoration Day (now Memorial Day), May 30, 1896, and sponsored by Cosmopolitan magazine. It began at the magazine's editorial offices near City Hall, ran to Irvington (where the magazine's printing plant was located) and back to the starting point. Only six automobiles of the 30 entered actually participated and it was something of a shambles at times. A Duryea won the event. In September, the Rhode Island State Fair staged what would become the archetype of American racing when it held three five-mile races—of five planned, with bad weather canceling the other two-at the Narragansett Park, the horse racing track adjacent to the fair grounds. The first two five-mile races were won by a Riker electric and the third by the Electric Carriage & Wagon entry. In France the Paris-Nantes-Paris event-of roughly 100 kilometers, in September—was followed by the epic Paris-Marseilles-Paris race that covered 1,700 kilometers that spanned 12 stages spread over 10 days. The winner was the Panhard et Levassor of M. Mayade, covering the distance in 67 hours 42 minutes and 58 seconds.

So what?

Good question!

Glad you asked!

Motor sport and the automobile have essentially grown up together, as the automobile and its use in sport began literally at the dawn of the automotive age. Motor sport is yet another aspect of automotive history that lies within the intersection of several overlapping Venn diagrams with other fields within Clio's Domain: Sport history, the history of technology, cultural history, public history, and social history to name but a few.

As a field of study, motor sport history tends to be ignored by sport historians and automotive historians alike, with even popular culture historians and historians of technology barely expressing any interest in the topic. If there is a "phobia" regarding automotive history within the community of historians, the attitude regarding the study of motor sport history within that same community is, to say the least, "toxic." That said, since 2015 the Society of Automotive Historians has partnered with the International Motor Racing Research Center (IMRRC) located in Watkins Glen, New York, to host the Michael R. Argetsinger Symposium for Motor Racing History (it was formerly named for Jean S. Argetsinger). The enduring theme for the Symposium has been a very simple one: The cultural turn meets the first turn. As a result, there have been literally dozens of scholarly paper presentations and panels made regarding the history of motor sport. The IMRRC has been a great partner in this endeavor and its support has enabled academics, independent researchers, and popular historians ("buffs," if you like) to present the fruits of their research for discussion and review.

As with so many subfields within automotive history, motor sport history is just one of many that offer countless opportunities for automotive historians to engage in researching and writing about subjects and topics that need further exploration. We need to engage with similar topic areas as well, of course. I would suggest that rather than focus primarily on the artifact that is the automobile, consider its context and its influence and effects. Ponder even the seemingly mundane and one soon senses that there is far more than meets the eye.

This a great time to be an automotive historian. The cultural turn is meeting the automobile. Have at it...

—H. Donald Capps



MERCEDES-BENZ: VERGANGENE TRÄUME VON MORGEN PART II

Editor's Note (mostly reprised from Part I): This is the second of a twopart article—under the subtitle which translates as "past dreams of tomorrow." The first addressed the late prewar era of "what might have been" and this part focuses on "what actually happened" to Mercedes-Benz in the early postwar era with a focus on its engines. Our author, past SAH president Louis Fourie, describes how the motivation for his research came about in this way: "After reading about the pre-WWII prototype V12 Mercedes-Benz engine in the remarkably detailed V12 book written by Karl Ludvigsen, this writer recalled some relevant photos in the German magazine Motor Klassik. Further checking in its issues for January and February 1986 as well as November 1987 uncovered articles written by Günter Engelen provided more insight, even though my understanding of the language is extremely limited. Recent research via Mercedes-Benz Classic contributed details for these cars as well, with all these sources cumulatively providing the material for the article that follows." So why is German used in the title? Yes, it's apropos to the subject, but it's actually recognition of the role of Motor Klassik magazine in the author's research—a reminder that there's a whole world out there beyond what is recorded in English.

#### What Actually Emerged Postwar

Unbridled optimism was evident everywhere in postwar USA while joint victors in the United Kingdom were trying to figure how to pay for the war. There was an intense need to fund the foreign supplies with an *export or die* mandate, while restrictions and rations kept enthusiasm in check. Expecting a repeat of the devastation that followed World War I, the mood in Germany was depressed. The lack of any draconian aftermath (like the Versailles Treaty after World War I) failed to lift spirits, and few if any anticipated any benefits from the Allied occupation forces.

The German automotive industry was in a shambles. Manufacturers in the eastern zones under Russian occupation—such as BMW

and the Auto Union makes DKW, Wanderer, Audi and Horch—saw their factories ransacked. The same applied to the Opel truck plant in Brandenburg, as well as the tooling for the Opel Kadett, also claimed by the Russians. In Western Germany there were significant operations that nobody wanted. Volkswagen was offered to anyone but the Russians, but there was little real interest. The largest prewar auto company, Opel, was not wanted by its parent. General Motors had derived a significant tax write-off early in the war that they were reluctant to pay back to secure bombed-out factories in a country with no economic appeal.

What Germany desperately needed were trucks and other commercial vehicles. In the case of Mercedes-Benz, meeting the truck demand meant ongoing production of a competitor's product. This situation had been brought about because the Reich Minister for Armaments and War Production demanded that Mercedes-Benz begin production of the Opel Blitz 3-tonne truck at its Mannheim plant. Although the mandate occurred in mid-1942, production did not commence until August 1944, using the designation L 701. A total of 10,300 units were built through June 10, 1949 when production ceased.

If you are wondering why a prestigious make such as Mercedes-Benz would resume production with its lowest cost car, there were two rational reasons. With expectations of a very depressed economy, the 170V was an appropriate choice for a projected bleak future for up-market cars, and it was decided not by Mercedes-Benz but rather by the occupation forces. With the need for commercial vehicles, the 170V was the only passenger design from Mercedes-Benz that had a commercial alternative such as vans, pickups and ambulances.

The first car engine built after the war, the 1.7-litre, was completed on January 22, 1946, but it would take until May 1946 before complete cars emerged. Only 214 units were built that year, all serving as pickups, vans, ambulances or police cars. It wasn't until July 1947 that the first postwar four-door sedan was built.

Before exploring the new Mercedes-Benz introductions through to 1951, it is appropriate to review the domestic competitors starting in 1950. In that year DKW established a presence in Western Germany that would evolve through the Auto Union name into a revived Audi in 1965. Prewar BMWs were produced by a new Russian entity Autovelo in Eisenach and it would take a new plant in Munich before the BMW 501 with a 2.6-liter engine could enter production in October 1952, followed later with a V8 as the 502. The irrepressible Carl Borgward began fielding his Hansa 1500 in 1949 and the 2400 in 1952. Opel had notched up production of 94,028 cars from 1946 to 1950, versus 31,352 of the 170V. The Volkswagen and Ford Taunus of 1948 were not competitors of Mercedes-Benz with a 1.2-liter engine, nor were the horde of microcars that emerged from BMW, NSU, Lloyd, Goggomobile, Messerschmitt and Heinkel.

Even under this constrained environment, planning by Fritz Nallinger and Rudolf Uhlenhaut for successor models was underway. The 170 D was created in May 1949 utilizing a diesel engine with the identical capacity dimensions of the gasoline engine. In the same month the 170 S also arrived with a new front suspension of double wishbones and coils in place of the upper and lower transverse front leaf springs of the 170 V. The chassis had minor changes and retained the W136 designation. The chassis upgrades involved track width increases, tire size changes and an increase in capacity from 1697cc to 1767cc that was also applied to the 170 V and 170 D from May 1950. The 170 S adopted much of the styling from the prewar W158 concept design. The new cabin of the 170 S had a more substantial appearance with the mudguards or fenders changing from flowing to a teardrop design. This new body with its updated chassis was available as the 170 SD with the diesel engine from January 1952. All four 170 models ran concurrently up to August 1953 at which point the totally new Ponton 180 had arrived costing DM 9,950. A cheaper 170 S-V at DM 8,300 was introduced in July 1953 with the 170 V chassis and engine including the transverse leaf front suspension and updraft carburetor, but with the later 170 S body. A similarly configured 170 S-D arrived at the same time with both lasting through to 1955.

The 220 W187 model was introduced in July 1951 with a totally new six-cylinder 2195cc overhead cam engine. Once again the updated 170 S chassis and cabin body were used but with additional length, largely related to revised front fenders that incorporated the headlamps for the first time in a production Mercedes-Benz. This engine, designated as the M180, in various capacities, would enjoy a lifespan well into the 1970s. Sales of the 220 dropped significantly

once the four-cylinder Ponton 180 arrived in 1953, but the six-cylinder car remained on the market through to May 1954, and August 1955 for the convertible; and then the Ponton 220 arrived in March 1955.

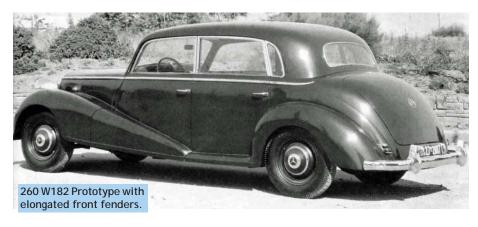
Considering that totally new designs were being prepared for 1951, planning and development would have been far advanced by late 1948. But at that time the outlook would still have been bleak. Regular and reliable sources of raw materials, which were subject to allocation by authorities, remained an immense challenge for production to meet demand. In addition, suppliers to the industry faced the same materials shortages.

Although the demand for a prestige model at the top of the industry may have appeared elusive, the pressure on the management of Mercedes-Benz to return to its traditional product leadership would have been intense. The fact that the six-cylinder Opel Kapitän was back in production would have been particularly irritating, considering that it was the only exclusive offering in Germany at the time. There was also the possibility that Opel would revive their prewar 3.6-liter Admiral; but there was a further incentive. If raw materials were so scarce and subject to allocation, at least their application could be devoted to a low-volume model that earned a high profit and relied on skilled craftsmen to build.

The top 300 sedan that emerged in 1951 with its 3-liter six was not derived from any of the earlier prototypes, because the 2.6-litre version was not upmarket enough and the V8 had an engine that was simply too large. Engine designer Wolf-Dieter Bensinger did not share the crossflow benefits earlier proposed by Röhr and Syring. Besides, Rudolf Uhlenhaut simply mandated that the camshaft belonged in the head. Early consideration for the M186 was a capacity of 2.8-liters, but by March 1950 it was set at 3.0-liters.

When it came to the design of the chassis, there was a progression from some of the earlier designs. The front suspension of the prewar 230 W153 consisted of two transverse leaf springs. The W159 prototype with the 2.6-litre crossflow head engine retained the lower transverse spring, but added upper wishbones with inner coil springs. The final production W186 300 had double wishbones at the front plus an anti-roll bar. The wheelbase dimension of 3050mm was common to all three variations mentioned above as was the usual coil spring swing axle, but the 300 added an electrically adjustable rear torsion bar. This was an early self-levelling suspension, catering to varied loads while offering uniform comfort. The actual chassis frame, although of a backbone nature, differed between the 230 and 300 because the wishbones at front required greater front rigidity and the frame on the 300 extended beyond the rear suspension, unlike the 230.

Styling was in the hands of Hermann Ahrens whose early renderings were a scaled-down version of the V12 designs with the headlamps in the fenders but close to the grille. While the slab-sided styling of the 1949 Ford would chart the future, buyers of the 300 were a conservative group, and unreceptive to new trends. Interestingly, the historically more stylish coupe design was not evident in the 300 S coupe and convertible. Their front fender and recessed radiator were far more conservative than the sedan's appearance. Although these



cars would become dated, a surprisingly successful restyle occurred in August 1957.

By 1951 the anticipated constraints of raw material allocations were receding fast. Actually, production for the first full year of 3,034 units for the 300 and 300 S was the highest of all the dozen years they were on the market. Production would only exceed 1,000 units in three other years. Nevertheless, the 300 served an essential role of being the standard bearer to re-establishing Mercedes-Benz among the top prestige manufacturers.

If the German consumer was not yet ready to recognize the glow on the horizon, the company management was clearly preparing for a strong future. By the end of 1951 Mercedes-Benz cars and trucks found their way into 65 countries, and Brazil was the largest export market. These export markets accounted for 22.4% of sales and the following year an assembly plant in Argentina came on line. In America the market was buoyant and an optimistic Austrian by the name of Maximilian "Max" Hoffman signed a distribution agreement on July 31, 1952. He persistently demanded that the early race victories be translated into a road going car. This insistence gave birth to the 300 SL, the sole exotic supercar of its day. Aware of the Pontons in development, he also correctly gauged the market for a sports car equivalent leading to the 190 SL. A bright future for Mercedes-Benz awaited.

—Louis F. Fourie

Mercedes-Benz Classic Archives (Internet Links \*):

This is the link for photos of prototypes 1926 - 1945:

https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/Prototypes-1926---1942.xhtml?oid=4194

The second row features all the front-wheel-drive prototypes - W144/W145/ W146. The last two rows features the prototypes mentioned in my article.

This is the link for photos of the production W136 170 saloon:

https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/Types-170-V-and-170-D-W-136-1946---1953.xhtml?oid=5192&relld=1001

This is the link for photos of the production W136 170S saloon: https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ ko/Types-170-S--170-DS--170-S-V--170-S-D-W-136-W-191-1949---1955. xhtml?oid=5069&relld=1001

This is the link for photos of the production W187 2200 saloon and convertible: https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/Type-220-W-187-1951---1955.xhtml?oid=4834&relId=1001

This is the link for photos of the production W186 300 saloon: https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/300---300-d-W-186-W-189-1951---1962.xhtml?relId=1001&oid=5026

This is the link for photos of the production W188 300S coupe: https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ko/300-Sand-300-Sc-Coups-W-188-1951---1958.xhtml?oid=4517&relId=1001

This is the link for photos of the production W188 300S convertibles: https://mercedes-benz-publicarchive.com/marsClassic/en/instance/ ko/300-S-and-300-Sc-Convertibles-and-Roadsters-W-188-1952---1958. xhtml?oid=6012814&relld=1001

\* These full links can be clicked with a mouse in the PDF version of this issue.

				cedes-Benz				
			Postwar	Specifications				
Engine Specifications								
Engine Code Number	M136	OM636	M136	OM636	M136	M180	M186	M188
Body Application	170 V	170 D	170 Va/b 170 S-V	170 Da/b 170 DS 170 S-D	170 S	220	300	300 S
Capacity cc	1697	1697	1767	1767	1767	2195	2996	2996
Cylinders	4	4	4	4	4	6	6	6
	IL	IL	IL	IL	IL	IL	IL	IL
Bore	73.5	73.5	75	75	75	80	85	85
Stroke	100	100	100	100	100	72.8	88	88
Valvegear	Side valve	Side valve	Side valve	Side valve	Side valve	ОНС	ОНС	ОНС
Compression	6.1/6.5:1	19:01	6.5:1	19:01	6.5:1	6.5:1	6.4:1	7.8:1
Carburetion	1 x Solex 30 BFLVS	Bosch injection	1 x Solex 30 BFLVS	Bosch injection	1 x Solex 32 PBJ	1 x Solex 30 PAAJ	2 x Solex 2-choke PBJC	3 x Solex 2-choke PBJC
Power @ RPM	38 3600	38 3200	45 3600	40 3200	52 4000	80 4850	115 4600	150 5000
Torque mkp @ RPM	72 1800	71 2000	80 1800	71 2000	83 1800	105 2500	114 2500	170 3800
Production Years	1946-1950	1949-1950	1950-1955	1950-1955	1949-1953	1951-1955	1951-1955*	1951-1955*
Body Specifications								
Engine Applications	170 V 170 D		170 Va/b 170 Da/b	170 S-V 170 S-D	170 S 170 D-S	220	300	300 S
Length	4285		4285	4450	4455	4507	4950	4700
Width	1580		1630	1685	1684	1685	1838	1860
Wheelbase	2845		2845	2845	2845	2845	3050	2900
Track Front/Rear	1310/1296		1310/1342-1360	1310/1435	1315/1420-1435	1315/1435	1480/1525	1480/1525
Weight kg	1160-1250		1185-1250	12520-1300	1220-1250	1350	1780/1830	1760
Tires	5.50-16		5.50-16	5.50-16	6.40-15	6.40-15	7.10-15	6.70-15
Suspension Front Rear	U	pper & Lower Tr	anvers Leaf Springs Swing axle		Double Wisbones Swing axle			
Production years	1946-50		1950-53	1953-1955	1949-1953	1951-1955	1951-1955*	1951-1958

# ACADEMIC "AUTOPHOBIA": A BRIEF RESPONSE

As a past president of the SAH and a retired university administrator, I noted with interest (and consternation) *H. Donald Capps*' presidential perspective column in the last issue of the *SAH Journal* (#304).

In it, he takes colleges and universities to task for not devoting a larger part of the curriculum to the study of the automobile and its social and economic impacts. In fact, President Capps goes so far as to use the word "autophobia" to describe that phenomenon and to accuse academe—college and universities—of having an institutional aversion to the study of the motor car.

Like him, I bemoan the fact that automotive history and culture are not more extensively studied in higher education. However, I think there are multiple explanations for this situation, and do not believe that one of them is a phobia, either among higher education faculty or the institutions as a whole, to studying the significance of the automobile in our lives. Rather, the sparsity of automotive studies on the collegiate level more likely lies in the factors explained below.

(1) Like it or not, the automobile is just one of an array of technological artifacts and developments that impacted our social and economic—even political—behavior in the 20th century. Many of President Capps' observations could be easily and truthfully applied to the collegiate study of trains, airplanes, and other means of transportation, none of which receives greater attention than the car in the higher education curriculum.

To ask colleges and universities to single out the automobile as *most* worthy of study would necessitate a greater justification than I am able to present. For instance, in my own area of specialization, the social impact of the automobile on rural America, the car was undoubtedly responsible for significant changes in how men, women, and teenagers conducted their lives. However, it is not really possible to separate those influences from other factors that were involved, such as the advent of rural electrification, radio transmission, rural free mail delivery, and the advent of motion picture theaters.

(2) Nonetheless, President Capps is correct in that there are curricular biases within the so-called "hallowed groves of academe," but those biases are not solely directed against automotive studies.

Colleges and universities, except on the Ph.D. level, like to take a big-picture view of the world of knowledge. Thus, while one can find majors in English Literature on almost all campuses, Shakespearean studies are limited to a course here or there. Although a subject as specific as biochemistry is a common major or concentration, the stand-alone study of DNA and its impacts on our very existence as human beings is not given the attention it probably deserves.

Thus, we probably are asking too much of colleges and universities by requesting that they significantly expand their offerings in automotive history and culture. For that to happen, we would need to formulate a better rationale than we currently have or for there to be a revolution in higher education as currently constituted.

(3) In addition, most students are not interested in studying the impact of the automobile per se (possibly for reasons explained below). The same holds true for their interest in the communications revolution of which they are central participants. While they have become avid, almost obsessive, users of cell phones, social media, and the Internet, students do not seem particularly interested in learning about how that technology works or how it is transforming life in the 21st century.

This relative lack of interest is, of course, reflected in the challenge the SAH and similar organizations face in attracting new members to their associations, societies, and clubs. We need to figure out how to interest not just students, but young adults as well, in a study of automotive history and culture; but that is a subject for another article.

(4) As others have noted, the automobile has been so well incorporated in our lives as to become almost unremarkable. It has evolved in such a manner that we think no more of it than a refrigerator, a TV set, or a dishwasher. While these technological artifacts, and others, have been tweaked over the years, their fundamental function in our lives has remained unchanged. As such, they are not viewed as being "exceptional" in any way and, therefore, unworthy of serious academic study.

Unfortunately, when attention *is* directed to the impact of the automobile

on society, it more often than not explores negative factors, such as air pollution, consumption of fossil fuels, road rage, etc. While these are important societal concerns, I would imagine that the SAH membership would rather the more positive aspects be dealt with in the classroom.

(5) As noted above, if a "phobia" is indeed abroad in the hallowed groves of academe, it is much broader in scope and infecting more than just the automobile. Much the same aversion seems to be impacting the study of railroads, airplanes, buses, bicycles, and other modes of transportation, none of which fare any better than the automobile in terms of their "slice" of the curriculum.

In fact, that latter observation may point to a possible curricular remedy. Taken together, the plight of these individual modes of transportation cries out for a broader approach to the curricular challenge. President Capps mentions the SAH's "big tent approach." Possibly what is needed is an even bigger tent than the one that usually appears annually in Hershey's Orange Field.

What may be needed is a push for greater attention to transportation studies, or possibly communications and technology, in the college curriculum. Automotive-related courses could play a leading role in this larger footprint, and the latter would be hard to ignore by the powers-that-be within higher education.

If nothing else, it would provide an umbrella under which academic scholars from the various sub-fields of transportation studies, one of which would be automobile history and culture, could exchange ideas, team-teach interdisciplinary courses, and combine on various writing and media projects.

(6) While we are at it, we should encourage research and publication of book-length works, accessible to the general public, on under-researched topics, such as the social and economic impact of the automobile on teenagers and persons of color, how medical care, education, and religion have changed, and comparative studies of the motor car's influence in the Americas, Europe, Asia, and Africa.

By so doing, we would broaden familiarity with the significance of the privatelyowned motorcar during the past 125 years and enhance the likelihood that the automobile would play a more central role in collegiate studies.

—Michael L. Berger



# ART, ARCHITECTURE AND THE AUTOMOBILE PART III

Editor's note: This is the next chapter of an eight part series presenting a historical contextual triad of Art, Architecture and the Automobile. The series began with issue #303—the reader is encouraged to refer to that issue, which included an introduction, for added context and understanding of the entire series' presentation.

#### III. PASSING OF THE HORSE; 1908 -

This theoretical event includes a bit of art and a dash of architecture, but mostly it is about the automobile.

The 1908 year is pivotal; it is the year of the "Passing of the Horse." It is that theoretical moment in time following the birth of the automobile in 1498 to the point when the automobile passed the horse and the horse-drawn carriage to become the vehicle of choice for personal transportation in this country. That moment in time and space is appropriately celebrated by the Stanley Wanlass sculpture "The Passing of the Horse."

The assertion of the importance of the year 1908 is derived from eight historic events which occurred that year. The importance of these eight events is undeniable and they are listed here in the approximate order of their occurrence.

- JANUARY 1908: Scientific American, the recognized publication of the scientific community, announced that the automobile had arrived. Accordingly, they opined that the agreed-upon style was a straight-line design, power was provide by a 4-cyliner engine, cooling by a gear-driven water pump and control by a steering wheel and sliding gear transmission.
- 2) FEBRUARY 12, 1908: seven automobiles departed at 11:00 AM from Times Square in New York City to begin

- the New York to Paris race. They arrived in Paris some 170 days and 20,000 miles later where the American-built 1907 Thomas was pronounced the winner. That demonstration of power, agility and stamina set the automobile apart from any accomplishment of the horse.
- MARCH 1908: Eight 1907 Cadillac cars were shipped to London, England, at the request of the owner of the local dealership, Fredrick S. Bennet. Three Model K one-cylinder runabouts were selected and summarily dismantled, and the 721 parts from each car were scattered about and thoroughly mixed together in a pile. Then eighty-nine parts were removed from that pile and replaced with eighty-nine matching parts from the parts bins at Bennet's Cadillac dealership. The cars were then rebuilt with simple tools in an outdoor setting apparently as a test of Bennett's boast to potential owners that the car was a "fix it yourself" proposition. On March 11, 1908 the three cars were driven 500 miles on the Brooklands track with an average speed of 34 mph and 29.64 mpg. Cadillac was awarded the Dewar Trophy for precision of manufacture and interchangeability of components by England's Royal Automobile Club.
- 4) AUGUST 8, 1908: The first Ford Model T rolled out of the Piquette Avenue plant in Detroit, to become one of the most heralded automobiles in American history. It served as daily transportation, conquered the constraints of our geography, entertained us at the Fairground races, made us laugh in comedic escapades at the local Bijou Theater and carried us through the dark days of the Great Depression. Its social impact is reflected in jokes on postcards and by personal tributes from owners. "She carried me



- to hunt, she carried me to marry; without a single grunt or suggestion to Tarry," wrote a young man circa 1920. Such comments of endearment speak volumes about the impact of the car on the lives of the owners.
- 5) OCTOBER 24, 1908: On a fashionable Long Island parkway, a 1906 Locomobile won the heralded Vanderbilt Cup race by defeating for the first time the finest racing machinery that the Europeans had to offer. It was a single event won by a single car, but it served as clear notification that the American automobile had arrived on the national stage.



- 6) NOVEMBER, 1908: William Crapo Durant quietly formed the General Motors Corporation in New Jersey and subsequently brought Buick, Cadillac and eventually Oldsmobile under a single corporate badge. In so doing he set the standard for organizational success in the industry, for no American corporation survived the post-World War I recession, the Great Depression of the 1930s and the economic turbulence of World War II and its aftermath without a similar structure.
- 7) NOVEMBER 22, 1908: The federal government purchased several Oldsmobile automobiles for use as mail delivery vehicles on rural routes, essentially signifying the





acceptance and recognition of the automobile as a proven entity and a vehicle of work rather than as a plaything for the wealthy. The automobile had demonstrated its muster during the San Francisco earthquake on April 18, 1906 and the subsequent four days of fire, but this purchase in 1908 was the first official recognition of the automobile offered by the federal government.

B) DECEMBER, 1908: The impending demise of the high-wheel carriage automobile became apparent in 1908. Charles Holsman built his first high wheel automobile in 1903 with the intent of appealing to horse-drawn vehicle owners and to solve the impediments on America's horrific roads. The high wheel design was intended to go through the muck and mire in the rainy season and clear the roots, rocks and holes in the dry season. He understood and clearly articulated, however, that the design would

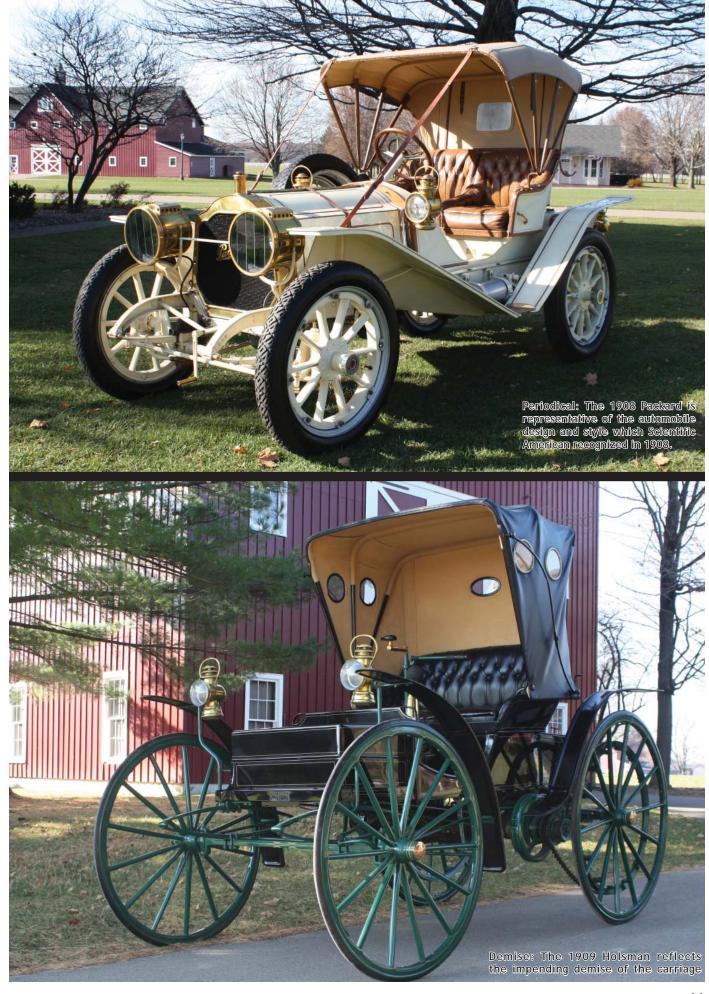
become obsolete when roads improved. The high wheel vehicle would hang on as an IHC truck until 1916, but the evidence was clear in 1908, that the design would not survive. Many high wheel automobile factories were shuttered that year and the end of Holsman production was just a year away. Reference sources suggest manufacture in 1910, but the final advertisement—"Get them before they're gone"—was published in December 1909.

The carriage automobile was being replaced by the definitive automobile identified by *Scientific American*. The resounding evidence is clear that the automobile had passed the horse although the exact date, time and place are not so clear. Perhaps it is best to assume that it happened not once, but occurred on numerous days in far flung places across this country in 1908.

—David O. Lyon









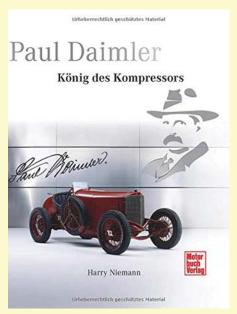
#### Paul Daimler: König des Kompressors

by Harry Niemann Motorbuch Verlag, Germany (2020) motorbuch-versand.de

272 pages, 9¼" x 10<sup>2</sup>/<sub>3</sub>" hardcover, German

Over 200 images, index Price: €49,90 / \$53.82 ISBN-10: 3613042673

ISBN-10: 3613042673 ISBN-13: 978-3613042674



r. Harry Niemann has written the definitive Paul Daimler biography, a 272-page, extensively footnoted, and lavishly illustrated book utilizing original materials provided by a Mercedes "Old Timer" enthusiast who outbid the Museum for Paul Daimler's papers in 2009. Niemann, a former director of the Daimler AG Archives, was the obvious choice for this project because he had authored biographies of Gottlieb Daimler and Wilhelm Maybach. The subtitle, King of the Compressors, comes as a surprise, given that the first successful supercharged Mercedes, the S series of the late '20s and the race cars that dominated Grand Prix competition in the '30s. were Porsche designs. Niemann's book reveals why Paul Daimler's compressor primacy has been overlooked by starting in

1885 when 16 year-old Paul rode his father's "compressor" motorcycle from Cannstatt to Unterturkheim. It was a lightweight compact 4-stroke engine, with compression achieved on the downstroke by sealing the crankcase. Even without the compression, the powerto-weight ratio of the Daimler motor that cornered not only the German but also the far greater French market for Lenk Ballons (steerable balloons) and the dirigibles that followed. After his father's death in 1900 Paul moved into aircraft motors subsidized by Kaiser Wilhelm II in the years leading up to WWI. The Daimler Flugmotor won numerous competitions and made the name Mercedes world famous. The D.III was considered the most reliable aircraft motor of WWI, and 12,600 were built-one of which was flown by Baron Manfred von Richthofen. As performance improved the decline at higher altitudes became a limiting factor and reminded Daimler of the compression motorcycle patented by his father. He turned to supercharging in 1916 and Niemann documents Daimler's progress with photographs and technical drawings.

The Treaty of Versailles dealt a heavy blow to German manufacturing. The Daimler company was forced to struggle on with three prewar versions of the Knight sleeve-valve motor, but Paul was determined to incorporate hard-won gains from aircraft engines into new designs. Efforts to supercharge sleeve valve motors failed because of exhaust gate lubrication problems, but moving to valve trains and incorporating the blower into the motor block eventually succeeded. Recognition eluded Daimler as he was forced out of his father's company in 1922. Niemann explores the reasons just as he did when Maybach left 15 years earlier and also reminds the reader that Porsche took over as technical director.

It is noteworthy that Daimler was immediately recruited by the Argus Company because of his successful aircraft motors and the fact that the company was also attempting to transition from fighter planes to automobiles. Moritz Straus owned not only Argus but also a controlling interest in Horch which is where Daimler developed Germany's first 8 cylinder engine. Between 1927 and 1931 there were 8,490 of his twin-overhead-cam eights produced, a record high for luxury limousines. During the same time period his former company, now Daimler Benz, sold only 4,055 units despite a plethora of models including the legendary S, SS, SSK. But

luxury car sales were hard hit by the Depression and resulted in conflict between Straus and his technical director. Paul remained committed to his father's credo: "The best or nothing"—while Straus was left to stave off "nothing." As a result Daimler found himself unemployed at the age of 60.

The final chapter in his life, 1931-1945, was marked by both health and financial problems but he once again turned to aeronautics: pressurized cabins, high altitude flight and improved compression motors utilizing exhaust gases. He also turned to automotive history, documenting his father's contributions and curating the automotive exhibit in the German Museum but none of the above provided significant income. Fortunately friends interceded. Argus and Daimler Benz provided financial support and delayed recognition of his engineering accomplishments. What would have turned out to be golden years were erased by the misery of the war, especially since he was a Berliner caught in the onslaught of the Red Army. He died in December of 1945 and never lived to see the Wirtschaftswunder.

-Frank Ernst Gump

Take Risk!: The amazing story of the people who made possible Richard Noble's extreme projects on land, at sea and in the air

by Richard Noble

Evro Publishing, UK (2020) evropublishing.com/ 612-344-8100

272 pages, 5½" x 8" hardcover 3 b/w, 29 color images, 6 drawings and index

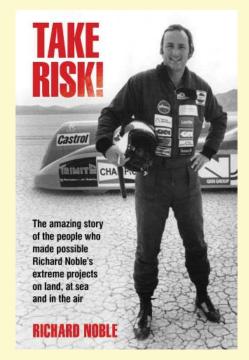
Price: \$24.95

ISBN-10: 191050551X ISBN-13: 978-1910505519

The term "force of nature" is used to describe people that, when you find yourself in their presence, passively draw you into their exhilarating orbit simply by their demeanor aided, of course, by your evocative curiosity.

Richard Noble is one of those people. This reviewer met the man in the early 1980s when he was fresh off the starting line of his world record setting adventures with Thrust2 and then became inextricably linked to his equally inspiring march punctuated by consternating moments of exasperation as he and his merry crew etched the first supersonic world land speed record with Thrust SSC as I reported for 17 newspapers and magazines worldwide.

Suffice it to say, in 40 years the pendulum of our relationship has swung hard through the arc hitting both ends of good



and bad, but through it all Noble always dwelled on the edge—his comfort zone that many shun, or dread.

And write a book? I wonder if he hired someone to chain him to a desk. Over all, the book is an excellent reflection of the world record setting risk taker. His voice is clear and Noble's personality bursts out repeatedly, evocatively page after page.

Of the 12 chapters, half deal with record-setting in the world land speed realm—these were familiar ground to me and I was amazed by how few specific names he offered up (admired or detested). Suffice it to say he stayed on topic. However, when absorbing the four chapters that focus on his aircraft adventures, it became clear that this was an honest, painful download even if he did keep a few cards out of the public reading trough.

One fundamental name was American speedster Craig Breedlove who had the audacity to snatch the world land speed record crown off the head of Britain's John Cobb in the '60s sparking Noble's resolve to right the perceived wrong. I asked Breedlove about his relationship with Noble when the supersonic game was afoot with them in 1997:

"Richard is a hard charging guy," Breedlove said. "And by hard charging, I don't mean the steering wheel, but exhibiting a great deal of determination."

Then Breedlove, who had not read the book, but knew the man, spotlighted a pivotal point that has beleaguered Noble for decades—sponsorship, not competitors. Asking Breedlove who was a tougher competitor, Art Arfons or Richard Noble, he replied:

"Although I was in competition with Arthur far more often, what made him tougher to beat was the abundance of continuous help from his sponsors who were intent on achieving records for promotional and corporate bragging rights."

It is here the reader comes to understand the weight of the yoke Noble wears keenly. Many of his sponsors fought him so hard at times that by the time they actually began making record runs the effort became as relaxing as a Sunday afternoon pleasure in comparison to the multitude mental beatings he took in conference rooms and from government staff. You might feel a bit sorry for the guy, but don't. He's had a hell of a life so far and is still rolling strong.

This much is certain: Noble is the unquestioned British secret weapon who inspired, mobilized and plowed through roadblocks with seemingly perpetual energy to achieve lofty speed goals. He also hit rock bottom and talks openly about how his mechanical sirocco unraveled after a 12-year trudge through sponsorships, government and people that ended with the collapse of his leadership of the 1,000 MPH Bloodhound jet and rocket-powered monster car.

The chapter on the water speed record shows the reader that Noble is on yet another mission and returns to where he started being utterly fascinated, no, mesmerized. I hope it does not cost him another wife; he's on number three. Breedlove racked up more than double that chasing speed records.

The final chapter "What Have We Learned?" made me laugh out loud because this unreservedly British bloke, one on whom Queen Elizabeth saw fit to bestow an "Order of the British Empire" (O.B.E.) honor, pulls back the curtain revealing that his ability to "carry on" against astounding odds is utterly American. Thank none other than Teddy Roosevelt, the man who gave the world teddy bears.

In 1910, Roosevelt spoke to a group in Paris (Sorbonne, Paris, April 23, 1910—Ed.) and his words continue to strongly resonate with risk takers 110 years later. It bears repeating as it sorts Mr. Noble perfectly.

"It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat."

Is the book worth reading? If the reader is curious about the business of motorsports, then yes, it gives a number of valuable "case study" back-stories. Racers searching for sponsors will get a sobering look at the dogged realties of securing financial backing in competitive motorsport. You might say getting to the green flag is much harder than earning a checkered version.

—Louise Ann Noeth

#### The Road to the Top is Not on the Map: Conversations with Top Women of the Automotive Industry

by Carla Bailo and Terry Barclay
SAE International (2019)
customersales@sae.org | sae.org/books
190 pages, 8" x 10" softcover
45 color photos, indexed
Price: \$40

ISBN-10: 0768000920 ISBN-13: 978-0768000924

and

# The Road to the Top is Not on the Map Personal Journal \*

by Carla Bailo and Terry Barclay SAE International (2019) customersales@sae.org | sae.org/books 64 pages, 6" x 9" softcover, no photos Price: \$18

ISBN: 978-1468601572

\* Title as listed in SAE catalogue/website (the book cover does not include the word "Personal").

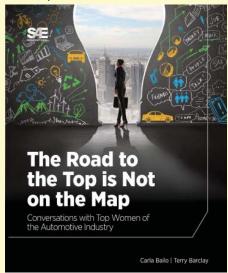
Thirty-six women—each in an executive position—respond to specific questions, usually six with one from each category on the pages of *The Road to the Top is Not on the Map*. The six categories are: 1) education and lifelong learning, 2) work-life integration, 3) mentor and sponsor relationship, 4) taking charge of your career path, 5) resilience, and 6) personal satisfaction.

The entire book is an interesting read although I find myself wondering if I found it so because of my gender and own prior

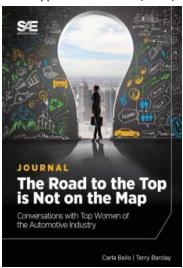
involvement providing contract service to one of the Detroit motor vehicle manufacturers. I also wonder if, or whether, any (many?) men will read their words (other than those who are friends or family of one of thirty-six that is).

The thirty-six ladies' careers have spanned decades nearly always in the employ of a major, recognizable company or university, and, no surprise, some are more articulate from a reader's perspective than others.

A bit of analysis revealed that many chose to respond to certain questions, other questions had only one or two choosing to address them, and two questions had no respondents whatsoever. So, most popular (in sixth group): "What would you say gives you the most satisfaction in your career?" Runners-up were these two in groups two and three respectively: "How have you dealt with work-life integration in your own career?" and "How important have mentors and/or sponsors been in your own career and have they been men or women?"



The "Journal" (below) is a separate volume to supplement the book (above).



The two questions no one picked to respond to are, respectively, in groups one and two: "Is there an ideal proportion of being self-taught and more formal opportunities?" and "Are there circumstances in which worklife integration is not possible?" Some insight relevant to the question asking about "ideal proportion": all of the respondents appeared to be degreed, many with advance degrees as well and just shy of half held engineering degrees.

A few of the responses your commentator found sufficiently informative to warrant sharing here.

One of the respondents was particularly articulate delineating the difference between a mentor and a sponsor explaining it succinctly: mentor equates to an advisor, sponsor to an advocate. Another was adept at differentiating between EI (emotional intelligence) as capacity of someone to recognize own or another's emotions and CI (cognitive intelligence) as information, problem solving and decision making abilities.

Another respondent was refreshingly blunt regarding the LeanIn concept writing: "The inequality women face (and this includes people of color and LGBTQ, and others)...can only be addressed if we stop telling women to be more or less something, and acknowledge that it is the inequity in our institutions, not women, that is the problem. ...our organizations must continue to evolve..." If you're not familiar with the concept you can learn about it at LeanIn.org.

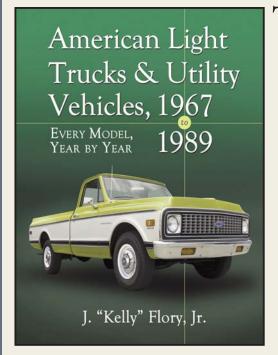
One can't help admire the woman who wrote that she "chose to work for a company that harmonized product, nature and life for a sustainable society." Then she quoted Reba McIntyre: "Success requires three bones...a wishbone, a backbone and a funny bone."

The companion Journal is available for those who wish to have a formal place to record their own answers to each question.

Each reader will gain differently reading these ladies' responses. I'll leave it to each SAH member to decide if this book is one you ought to add to your library to expand awareness with this caution: think for a moment had *F. Scott Bailey* not seen something in a lass named *Beverly Rae Kimes*, who at the time possessed zero automotive knowledge or interest but had a dual undergraduate degree in journalism and communications and a graduate degree in Journlism/Theatre Arts, how much we'd all have missed!

—Helen V Hutchings

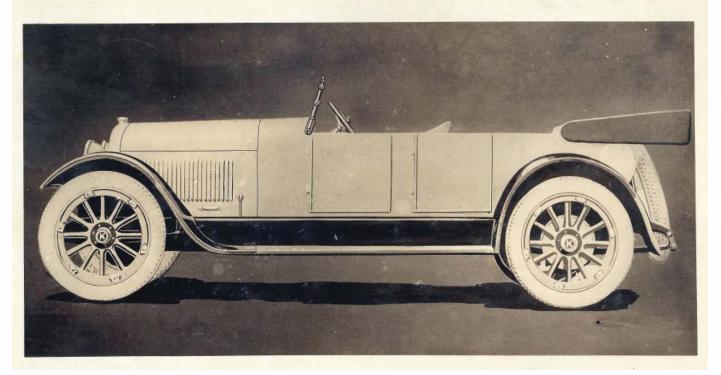
# Special price for a limited time: \$99 \$79

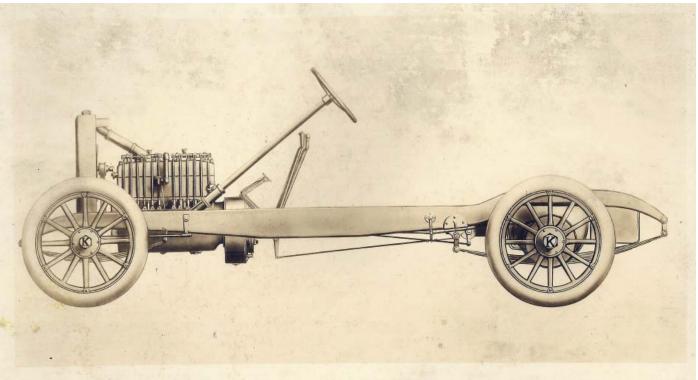




Trucks changed dramatically from the 1960s through the 1980s, with the rise of off-roaders, the van craze of the 1970s and minivan revolution of the 1980s, the popularization of the SUV as family car and the diversification of the pickup truck. This comprehensive reference book follows the form of the author's popular volumes on American cars. For each year, it provides an industry overview and, for each manufacturer, an update on new models and other news, followed by a wealth of data: powertrains, options, paint colors and more. Finally, each truck is detailed fully with specifications and measurements, prices, production figures, standard equipment and more.

1472 pages \$99 \$79 hardcover  $(8\frac{1}{2} \times 11)$  1300 photos, appendices, bibliography, index





# the return of: The Mystery Photo(s)

Right: These are the actual linen-backed prints of the above images.

I was sorting through some automobile ephemera left to me a decade ago by a late friend. One item that came to hand was an album of photos of a car I did not recognize. The linen-backed prints bore the stamp of "N. LAZARNICK, New York," the renowned fashion and automobile photographer, and comprised some engineering drawings plus two views of an automobile. I'm not sure whether they were taken of an actual chassis and a finished car, or whether they're just renderings of a prototype. I was puzzled, as the 1920s-looking touring car matched up with nothing in the *Standard Catalog of American Cars 1805-1942*. It bothered me for days, until the light bulb went on. There's a helpful clue hiding in plain sight. Automotive sleuths, what say you? Name that car! First correct answer received by the editor will win an obscure and very collectible item of auto ephemera from that same collection.

—Kit Foster

