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### Billboard

Announcing the 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 AACA forum contains a myriad of forums including forums for other entities (e.g., The Classic Car Club of America has its forum there too). Accordingly, the SAH will have its own forum within a community of automotive enthusiasts that will help foster a great level of interaction to promote automotive history.

**Cancellation of the SAH Annual Meeting of Members & Gala Awards Banquet:** The annual meeting and gala awards banquet in October this year has been cancelled due to the COVID-19 epidemic, following the cancellation of the AACA Eastern Division National Fall Meet ("Hershey"). Earlier this year the annual history conference was cancelled as well for the same reason. There is every expectation that the event will come back for October 2021. Please go to the SAH website (**autohistory.org**) to monitor future developments.

**Wanted:** Information on the White Steam Car. I am writing a book on White Steamers and am seeking information. Please contact *Don Hoke* at:1925Stanley@gmail.com

**Wanted:** Contributors! The SAH Journal invites contributors for articles and book reviews. With your help, we can continue to feature a steady and consistent stream of material advancing the record of automotive history. Please contact the editor directly. *Thank you*!

**Front cover:** This is the 1921 Duesenberg 183 Grand Prix Race Car, one of the cars that raced in the 1921 French Grand Prix, which is on display at the Simeone Foundation Automotive Museum in Philadelphia, Pennsylvania. For more information, visit the car's page at the museum's site: **simeonemuseum.org/collection/1921-duesenberg-183-grand-prix-race-car/** 

The image is by automotive photographer extraordinaire *Michael Furman*, and it forms part of the array of photos he contributed to an excellent book by *Frederick A. Simeone* (2013 SAH "Friend of Automotive History" award recipient), *The Spirit of Competition: The Simeone Foundation Automotive Museum*. For more on the photographer, visit: **michaelfurman.com**. The photo appears courtesy of Mr. Simeone and Mr. Furman.

**Back cover:** This Duesenberg ad appeared in the August 1930 edition of *Country Life* (p. 31). It has been frequently pointed out that there were ads that promoted the Model J that never showed the car and would simply have a tagline like "She drives a Duesenberg"—selling the image. Here is a reminder that they also used straightforward and conventional automotive advertising for, as it says on the ad, "The World's Finest Motor Car."

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.



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## **President's Perspective**



lthough most of the conferences sched $oldsymbol{\Lambda}$ uled for this year have been either canceled outright or postponed until much later, the Automotive Historians Australia (AHA) will be conducting a one-day symposium on October 31st at Castlemaine, which is just north of Melbourne. The theme of the symposium is Regional Automotive Futures and the event will be held at the Autoplex Castlemaine. Unlike the previous AHA conferences, this year's symposium will consist of a series of panels and several discussions rather than the usual presentation of individual papers. I strongly encourage supporting this wonderful endeavor of the AHA. It is a crackerjack organization, hosting a true go-to international automotive history conference. It is definitely worth putting on your listing of conferences to attend, both this year's and those in the future.

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In another item related to the AHA, its president, Dr. Norm Darwin, is currently in the midst of an effort to ensure that the archival records of GM-Holden, which is now ending its many decades as it ceases producing right-hand drive automobiles, will be preserved in Australia. At the moment, this effort by Norm and the AHA seems to be bearing fruit. In addition, there is a parallel effort to add the GM-Holden Head Office, the Social Centre, and the Technical Centre buildings in Fisherman's Bend to the Heritage Victoria listing. This is a very important effort and I urge everyone to support the AHA and Norm's efforts to make this happen.

The Third European Conference for Automotive History is scheduled for the autumn of 2021. The host will be the Museo Nazionale dell'Automobile in Torino, Italy. Details will be forthcoming. This is another wonderful conference that deserves everyone's support and, especially, their participation if at all possible. We need to offer our sincere thanks to the several automotive history organizations making this conference possible. I strongly encourage everyone who can to propose paper presentations, panels or discussion ideas for this excellent conference.

Once again, I wish to shamelessly plug the "Fourth and a Half" International Drive History Conference that will be held April 22 to 24, 2021, in Allentown, Pennsylvania. This is a joint venture by the Historic Vehicle Association (HVA) and the SAH. I cannot praise Diane Parker, the vice-president of the HVA, and her hearty team at Allentown highly or loudly enough. There was every indication that this year's Fourth International Drive History Conference was going to be a great event. Everyone involved had poured their heart and soul into the event. Needless to say, we were all absolutely crushed when faced with the decision to cancel the event. That said, Diane and the rest of us are already working on the 2021 conference and think that it will be even better than what we had planned for this year's event.

Which brings me to what I once thought was among those occurrences simply considered to be "merely impossible" or "very highly unlikely": the cancellation of the October 2020 Eastern Division National Fall Meet of the Antique Automobile Club of America (AACA) in Hershey, Pennsylvania. After being held through troubled years-everything from the Cuban Missile Crisis to the Three Mile Island partial reactor meltdown, along with a few hurricanes and other weather challenges-with the CO-VID-19 pandemic, alas, the AACA finally met its match. Love it or merely seriously like it, the Fall Nationals at Hershey holds a special place in the traditions of the Society of Automotive Historians: Hershey being the site of the first meeting of the SAH in 1969. It was a decision that was made with much reluctance, but one that had to be made.

One unfortunate consequence of the AACA's decision to cancel the Fall Nationals at Hershey is that we will not be having our annual awards dinner at the Hershey Country Club. This is regrettable, of course, but unavoidable. I am certain that *John Marino*, who has been the sparkplug and mastermind behind our annual award dinners for some years now, will make the 2021 event very special.

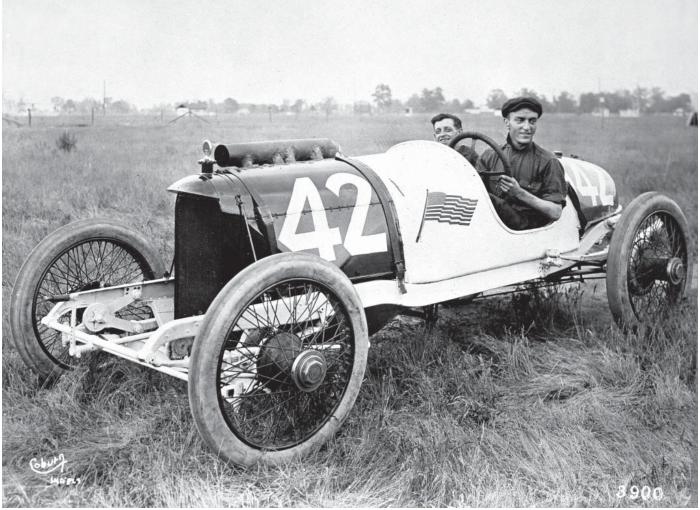
To paraphrase what Gianni Cancellieri always reminded me: "Happy automotive history research!"

—H. Donald Capps

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S

NEW MEMBER



Eddie Rickenbacker was a racing driver before he became a national hero in WWI. He started his racing career with the Duesenberg brothers but moved on to better funded teams after he became successful.

# **DUESENBERG DAYS**

Editor's note: The Duesenberg story has been the subject of many books and articles, and here we have a brief look at their general history with a focus on aspects of their racing history. Our author, Leif Ortegren, is a longtime member and this is his first contribution to this publication. If you're new to the Duesenberg story, we hope this introduction will serve as inspiration for continued reading—a good place to start is with the books listed in the endnotes, and we'll add Duesenberg: The Mightiest American Motor Car by J.L. Elbert. Photos sourced: IMS Museum.

Their name became synonymous with over-the-top elegance and performance, but these two brothers, raised on a midwestern farm, took on the racing world with little more than their own ambition and "can-do" ingenuity. In the period of their greatest success they were perpetually just scraping by, always nearly out of time and money. In the slang of the day, a "Duesenberg hose clamp" was a scrap of baling wire, and a "Duesenberg day" meant working 18 hours straight.

Fred and Augie Duesenberg immigrated to Iowa from Germany in 1885 at ages 8 and 5. At age 17, Fred began working for a farm implement dealer, where he showed great aptitude and began his mechanical education. His younger brother soon followed him, and as things progressed they built and raced bicycles and started to dream about the new age of automobiles, developing their first gasoline engine around 1900. Fred worked for the Rambler Motor Car Company in Kenosha, Wisconsin, for a few years and they both worked for the Mason Motor Car Company, where they first the company's racing cars, before striking out on their own.

Eddie Rickenbacker was one of their early drivers. He reported in his autobiography that when he began working with them in 1913 the Duesenbergs had only "seven silver dollars and one cat." He continued: "At Sioux City we were so broke that I could not garage the cars but kept them under the grandstand. The crew slept on cots in a little adjoining room and ate on credit at a nearby greasy spoon. I talked a local farmer into giving me room and board for \$2.50 a week, also on credit. After we won the \$10,000 first prize, I told him, we'd have plenty of money."<sup>1</sup>

The farmer's faith was justified, as Eddie did win and another Duesenberg came in third to start a pattern that lasted another 15 years. The 1920s are often seen as being dominated by Harry Miller's meticulously finished creations; but actually, his cars won Indianapolis only four times in the period, in spite of dominating the fields, and Duesenberg won three times, often with just a few cars in the race.

One classic example of the Duesenbergs' innovation is that often derided hose clamp. Made of high strength wire (never baling wire) and wrapping twice around the hose, the Duesenbergs felt it eliminated the pinch point of the standard clamp and was less likely to leak or come lose. Their chassis design, which featured softer springing than the competition, gave their cars superior control on uneven surfaces and a versatility that allowed Jimmy Murphy to win the French Grand Prix in 1921 on a terrible rockstrewn surface, and then use the same chassis (with Miller power) to win Indianapolis the following year. As the decade wore on the Duesenberg chassis became the preferred basis for "specials" with many types of engines, from Millers to Cummins Diesel.

In 1923, the engine displacement changed from 183 to 122 cubic inches. The development of the new engine really tested the brothers' resources and organization. They were building a team of three cars but the process took so long they completely missed qualifying for Indianapolis and were still struggling to finish the night before the race. One car left the workshop early that morning, was allowed to start at the back of the grid and finished 10th; the other two were caught in pre-race traffic and didn't make it at all. They bounced back the following year, winning despite being outnumbered on the grid by Miller 14 to 4.

Fred Duesenberg had little formal education but was a very original thinker. His successful pre-WWI engine was unlike any other with very long vertical "walking beam" rocker arms to connect the low mounted camshaft with horizontal valves high in the head. During the war, he was a member of the national advisory board on aircraft engines and was exposed to the latest ideas from around the world. A few years later, supercharging was developed as a way to allow planes to fly higher without losing power. Mercedes tried it at Indianapolis in 1923 with a Roots type blower which was only engaged at full throttle. Its "on/off" nature made it very difficult to control in the turns and Mercedes finished midfield. Duesenberg's solution, developed with the help of Dr. Sanford Moss of General Electric, was a constantly engaged centrifugal unit. Since the pressure of this type of blower varies as a function of engine speed, it comes on gradually, and greatly helped drivers L.L. Corum and Joe Boyer to win in 1924. The next year, almost all entrants used the system.

In 1926 the rules changed with engine size reduced again to 91 cubic inches (1½ liters). More original thinking about how to get similar horsepower out of a much smaller package led the Duesenbergs to develop a two-stroke version of their more conventional straight eight design, using rotary valves for the intakes, window exhaust ports in the cylinders and a centrifugal supercharger to do the scavenging as well as provide boost. It must have been something to hear, with pairs of cylinders firing simultaneously. Ben Jones qualified the car in the middle of the grid, but the engine did not last the race. Off track issues soon occupied more of the brothers' time and it wasn't developed further.

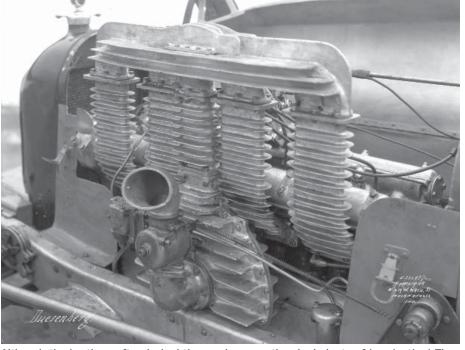
Their racetrack success inspired investors to approach the brothers to produce their own passenger car. The Duesenberg Automobile and Motors Company was formed on March 8, 1920, and set up production in Indianapolis. The car they produced—the Straight 8 "Model A"—was mechanically similar to their racing cars, and total production was similar to the total for the famous Model J. Over its production run the competition eventually caught up with the Straight 8's engineering and despite many financial machinations, the company floundered and was purchased by E.L. Cord in the fall of 1926. Cord was a businessman and his plans for Duesenberg did not include racing. Fred became the chief engineer in Cord's plant and Augie took the racing business across the street. Although Fred's "day job" doubtless kept him very busy, he continued to work with Augie behind the scenes.

When Cord's company also went bust in the late 1930s the remaining parts were sold off and eventually came to Marshall Merkes. Marshall was friends with Augie and after WWII they briefly thought about reviving the marque. Thinking about this earlier period Marshall had this to say:

"Cord did not want Augie around. The biggest problem was Fred and Augie were building race cars, using factory materials, labor and facilities, and then they would sell the car and pocket the money. Cord would have none of that, and so Augie was left out. So he simply moved across the street, to the upstairs loft of the Thompson brothers' pattern shop, and not only did Fred spend a lot of time over there, but they'd come back to the factory at night and make parts. It didn't stop anything, and Cord did not have that situation under control at all."<sup>2</sup>

Duesenberg's last Indy victory came in 1927, but there were Duesenbergs pieces in the field until 1938. In this era, Augie and Fred were separate entities, at least officially, with Augie producing cars based on their established racing car pattern, and Fred (at the factory) producing a few cars with a larger production-based engine as allowed by the new rules, sometimes called the "Junk Formula" introduced after Eddie Rickenbacker bought the Speedway in 1930. In 1931 a young Wilbur Shaw thought Augie's operation represented his best opportunity. Shaw

Although the brothers often lacked time and money, they had plenty of imagination! They pioneered the use of the supercharger in American racing. This engine is from 1928.





Wilbur Shaw takes possibly the wildest ride ever in 1931. (*This photo was altered to illustrate Shaw's flight off the track. –Ed.*)

approached Augie and was told: "If you want to help build it, you can have the first chance to drive it." He signed on and learned the meaning of a "Duesenberg Day." He wrote: "We'd report for duty early each morning, take time off for hamburgers and coffee late in the afternoon and then rush back to the shop to start the night shift. About two or three o'clock Augie would put his tools aside and say 'Well boys, let's knock off and get a good night's sleep. Be back about seven-thirty in the morning.""<sup>3</sup>

Shaw's pure racing machine sadly blew its engine sky high in qualifying, but he was offered a relief ride in one of Fred's Model A-based racers. What a ride it was! Several laps into his shift in Phil Pardee's car, Shaw entered a turn too fast and lost it. The outside wall was lower in those days and vertical, rather than perpendicular to the banked track surface, and it acted like a ramp, sending him airborne. He flew high enough to reach some wires on a telephone pole and landed right side up outside the track. Amazingly, he was only a little banged up and he walked back to the Duesenberg pit, making sure he was seen by his mother in the grandstands. He was worried Fred would be mad, but instead, Fred had him take over Jimmy Gleason's car as a relief driver. Once back on the track, he noticed the first few cars he passed immediately slowed and swerved away from him. He later learned they had seen him go over the wall and couldn't believe their eyes that he was back!

Fred passed away following a traffic accident in 1932 (*He was recovering from his injuries, but he developed and died from his eighth bout with pneumonia*<sup>4</sup> —*Ed.*), but Augie soldiered on as a consultant to Auburn (also owned by E.L. Cord) and later helped develop Ab Jenkins' Duesenberg-based speed record car. He died of a heart attack in 1955 at the age of 76.

—Leif Ortegren

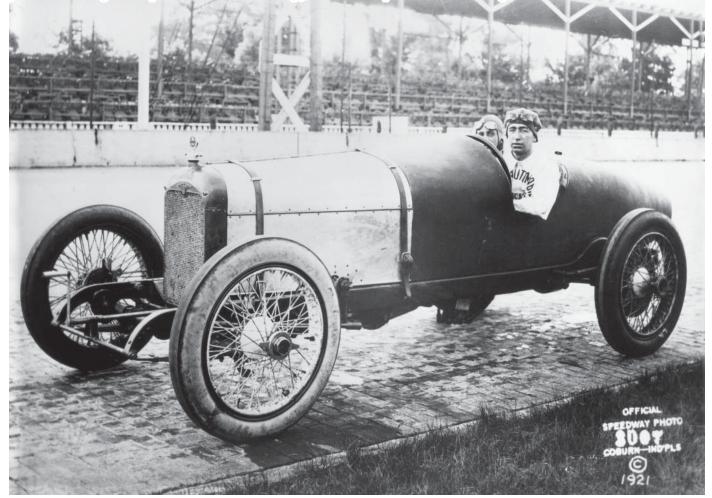
#### (Endnotes)

<sup>1</sup> Edward V. Rickenbacker, *Rickenbacker: An Autobiography* (Englewood Cliffs, New Jersey: Prentice-Hall, 1967) p. 59.

<sup>2</sup> Griffith Borgeson, *Errett Lobban Cord: His Empire, His Motor Cars: Auburn Cord Duesenberg* (Princeton, New Jersey: Automobile Quarterly Publications, 1984) p. 43.

<sup>3</sup> Wilbur Shaw, *Gentlemen, Start Your Engines: An Informal Autobiography of an Immortal Racing Driver, Sportsman and Gentleman* (New York, New York: Coward-McCann, 1955) p. 129.

<sup>4</sup> historicracing.com *Augie Duesenberg 12/12/1879 - 18/1/1955* https://www.historicracing.com/driverDetail.cfm?driverID=2405.



Duesenberg was famous for arriving to race just in the nick of time, often with cars that had a very hasty paint job, or no paint at all. This is Eddy Murphy's Indianapolis entry in 1921; note unpainted hood and primer body.



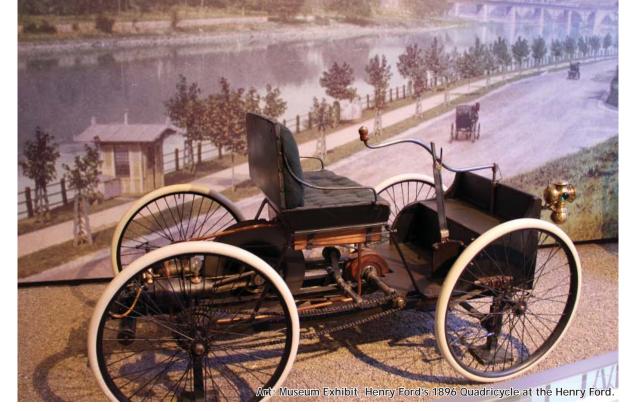
## ART, ARCHITECTURE AND THE AUTOMOBILE A CONCEPTUAL STRUCTURE OF AUTOMOBILE HISTORY

Editor's note: The study of history is processing what happened as well as its context. Here we have an interesting perspective, a contextual triad of Art, Architecture and the Automobile. This formulation culminated in a new book so-titled by longtime member David O. Lyon, Ph.D., who served on the faculty at Western Michigan University for 35 years. His tenure included appointments as Head of the Psychology Department, Acting Dean of the College of Arts and Sciences and finally Associate Dean of the College of Arts & Sciences. Before the book, David delivered a version of this set of articles as a lecture (see: oldcarsweekly. com/hobby-news/gilmore-car-museums-speaker-series-2018). Its a large presentation in eight parts, which will appear here and over upcoming issues of the SAH Journal. David has written books published by the Gilmore Car Museum, including the new one mentioned above available via the museum, ISBN 978-0692158623. All the images are sourced to the author, unless otherwise indicated.

The present writing offers a conceptual organization of the history of the automobile as well as a bit of its future ranging over the years from 1498 to 2028. How do I get my arms around this massive amount of historical information? That history is divided into eight eras, each with a descriptive title. These titles

avoid automotive labels such as *brass car*, *muscle car* or *sports car*, but instead reflect artistic trends, iconic images and notable architecture of the era in which the selected cars were built. In addition each era is summarized using a variation of the dictum, "*Form follows Function*," which points to the interaction between the design of the automobile and the variabilities of the function. The primary focus of the concept is the organization and interpretation of vintage automobiles for museum visitors, students and interested persons.

At first blush, the intervention of art and architecture may seem odd, but art and architectural designs tend to have designated titles and often are associated with specific periods of American history. The citation of common elements of art and architecture is a conceptual framework, and does not imply collusion among the actors in the identified period. In other words, it does not imply that Henry Ford and Frank Lloyd Wright commiserated on the style of art, architecture and the automobile within the several periods when they were both active. Each period ends the same year that the next period begins, which was done intentionally as a reminder that periods of history are approximations and typically do not begin or end precisely and completely at a date certain of some designated year.

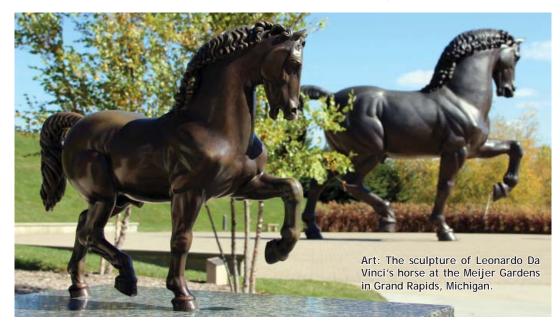


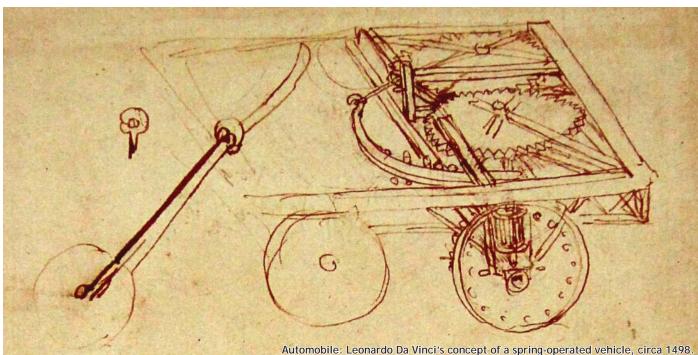
The argument advanced here is conceptual, and each part of it is not necessarily contained within the specific period which is cited, because social and economic changes do not occur in a digital fashion. In addition, every automobile within an identified period does not necessarily reflect every description of automotive style identified for that period, because each period contains the ideas of numerous designers, inventors and promotional campaigns. Disagreement rather than agreement is the root of social, economic and industrial change, and dissension from a common theme is more easily identified than is a list of numerous and varied events, designs and styles.

The photographic support for the suppositions argued here is presented with only a few images, not because others do not exist, but simply because of space limitations. Each section generally includes six photographs, selected to reflect the conceptual intent of that section. I. THE PRIMITIVE AUTOMOBILE, 1498 to 1898 It is described by the dictum *Function without Form*.

L eonardo da Vinci was born on April 15, 1452, and died May 2, 1519. His conceptual drawing of a self-powered road vehicle using the motive power of a spring is not dated, but reference sources suggest the development of his ideas of mechanics occurred between 1480 and 1500. On this basis the 1498 date was selected to serve as the starting point for the present discussion.

His artful drawings also include a giant horse, and the example shown here is based on his only drawing of a horse without a rider. It was first sculpted in 1999 as a four-foot model, and was followed by a 24-foot sculpture by Nini Arkuma, which was installed at the Meijer Gardens in Grand Rapids, Michigan, in 2007. The photo shows both the four-foot and the 24-foot sculptures at the garden site.





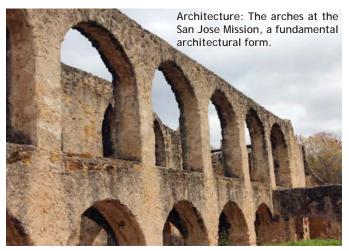
Leonardo also designed homes and cityscapes, thus contributing to the three primary aspects of social and commercial life explored here: art, architecture and the automobile. The architectural structure pictured is similar to Leonardo's designs, although it is the 1784 San Jose Mission in San Antonio, Texas. These images establish a firm base for automotive history by presenting a jumping-off place for the automobile and the milieu in which it was first created.

The years of the primitive automobile extend from 1498 to 1898 and the number of automotive vehicles created within this period is extensive. Only three are shown here, and those three, Leonardo's automobile, Nicolas-Joseph Cugnot's fardier à vapeur and the Quadricycle, seem to have little similarity, but that is the point. Initially, Leonardo expressed his idea, but his art, his architecture and his automobile took centuries to mature. His drawing of the spring operated vehicle can be speculatively dated to 1498. The prototype fardier à vapeur was made in 1769 and the surviving example was built a year later. It was the world's first functional primitive automobile. It languished in a corner of a military warehouse until it was rescued by the curator of the Musée des Arts et Metier in Paris in 1812. (For more on Cugnot's fardier à vapeur see SAH's Automotive History Review No. 21, and SAH Journal issues No. 191 and No. 300, and the 2011 book Nicolas Cugnot and the Chariot of Fire by Alain A. Cerf-Ed.) More than a century later, Henry Ford drove his little Quadricycle down Bagley Street in Detroit. It was built on a 49-inch wheelbase, and was preceded by a man on a bike warning pedestrians of its approach. The functional design of the automobile had yet to be defined.

Imagine seeing a man waving a red flag ahead of an approaching automobile while barking a warning cry-hold your women folk close, shutter your children to home, leash your dogs and cage your fowl, dangerous machinery approaches with exploding engines and speeds that will take your breath away-this scene describes the automobile's social impact in the 19th century. The red flag requirement was contained within British legislation; the Locomotive on Highways Acts of 1861 and 1865 restricted the movement of self-powered road vehicles and impeded automobile development until 1896 when it was rescinded. However, formal and informal social resistance persisted in the United States beyond that date. In sum, the self-powered vehicle was a primitive, unknown quantity and people were nervous in its presence.

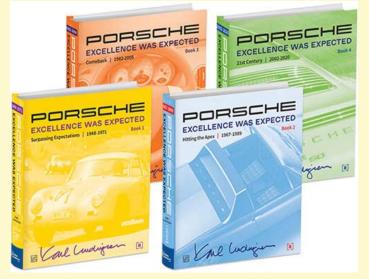
—David O. Lyon







Porsche: Excellence Was Expected by Karl Ludvigsen Bentley Publishers (2019) bentleypublishers.com/ 800-423-4595 2,834 pages, 9" x 10½" hardcover 4-volume set 2,912 photos, illustrations, diagrams, extensive notes Price: \$524.95 ISBN-10: 0837617693 ISBN-13: 978-0837617695



n his review for this Journal (#212) of the 2nd edition of Porsche: Excellence Was Expected, SAH member Howard Pace observed: "This book had to come back sooner or later. Karl Ludvigsen's first edition of Excellence was Expected was published in 1977 and instantly became THE reference book for Porsche enthusiasts the world over. Ludvigsen has not only brought this classic up to date but he has revisited some of his previous entries in light of recent investigations." Pace ended his review by noting that Excellence Was Expected was a landmark book in automotive history and "one of the most in-depth histories of a single manufacturer and its cars that has ever been written. Full of the minutiae that fascinates historians, it never loses track of telling an interesting story as well."

So what can we add now that we have this 2019 edition in hand? We can only say: Bigger, better, more facts uncovered, and more stories revealed. At the same time we are now told that this will be the *final* update of this masterwork. So in this 2019 edition Ludvigsen went back and improved every earlier chapter to heighten readability and to extend the Porsche story up to the current year. This has been nothing short of a remarkable accomplishment.

Yes, now nearly ten years after the last edition our Society's 2002 Friend of Automotive History has weighed in again with what can only be described as the *magnum opus* among all of his many books. Did I tongue-in-cheek say "weighed in" or what? Seriously, I had to know. Somewhere I'd read that the earlier three-volume edition of *Porsche: Excellence Was Expected* weighed in at slightly over 20 pounds, so I had to place this four-volume work on the scales out in

> my garage. Ah, now 25 pounds! Not the kind of books you take to bed at night for light reading, but rather volumes best consumed by Porsche aficionados, little-by-little, day-by-day, and perhaps savored over a fine glass of brandy (and a cigar if you're so inclined). For the likely

> few readers here unfamiliar with Karl's

career or his many books you are referred to his Wikipedia page at: wikipedia.org/wiki/ Karl\_Ludvigsen

The new edition builds in substantial ways on the acclaimed reputation of the first edition (which, by the way, was only a single volume). The second edition in 2003 was enlarged to three volumes and the third revision, while still three volumes, was expanded in scope and released in 2008. For the latest edition he researched previously-unavailable Porsche archival materials and conducted numerous fresh, in-depth interviews with significant contemporary Porsche figures. Moreover this new edition has unearthed many new facts that allowed for revisions of earlier interpretations of the company and its cars over the years. Pointedly, this edition is far more than just the addition of a few new chapters that cover new models that came to market since the third edition. The compendium has been totally visually redesigned, with much material rearranged for better comprehension and understanding. The four volumes now comprise 2,834 pages and almost 3,000 photographs and illustrations. May I repeat myself about Porsche buffs reading into the wee hours, sipping that glass of brandy?

Excellence Was Expected in its latest iteration is remarkable for its breadth of coverage and its technical depth, especially in its coverage of every road and racing car from the first Gmünd coupe through the development of the 2020 all-electric Taycan. For instance, thirty chapters are devoted to tracing the evolution of the iconic Porsche 911 from its conception in 1962 to the cutting-edge technology in the current 992-platform. Porsche is undisputedly the world's largest racecar manufacturer, and given the manufacturer's rich competition history, no fewer than 44 chapters cover this aspect of the company's activities. Friend Karl takes the reader on a tour of Porsche's impressive list of motorsport achievements, from the 550 Spyder's class win in the 1954 Mille Miglia to the 919 Hybrid's third consecutive overall win at Le Mans in 2017.

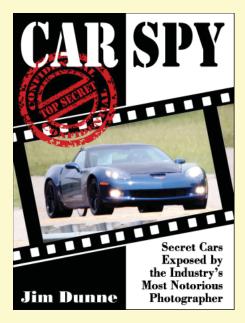
There are ten new chapters with updated coverage of the Boxster, Cayman, Cayenne, Macan, and Panamera, and 32 new 'Focus' chapters highlighting fascinating people and rare Porsche cars through the decades. There is also an updated Competition Victories appendix. Think back to 2008: Porsche was still making the 997, had just jumped into the direct injection end of the powertrain pool, the Panamera was the new child birthed, and the Macan was just a twinkle in the company's eye; and hybrid was still just another new thing in Stuttgart. As an added highlight the reader is now offered a Porsche model timeline with exclusive color illustrations from 1948 to 2020.

Especially noteworthy is that now we are presented with a more human drama, unfolded with opportunities in these pages to go behind the scenes in the exploration of both the masterpieces and failures of the marque. The reader is offered compelling evidence of just how and why—even after the events that plunged Porsche into the hands of Volkswagen AG—*Porsche has continued to be Porsche*. In the "Foreword" to the new edition Karl says it best: "I decided that no mere update would meet the demands of the modern reader. Porsche's story is one of dramatic transformation and revival, mandating a 21st century perspective written virtually from scratch. No paragraph of the original book escaped improvement."

Our Society's Friend has devoted countless hours of passionate toil—over many years—to bring this final edition to the community of automotive historians as well as, specifically, to the legions of Porsche devotees. Lest we forget that car guys and gals do have rich lives outside of their passion for the motorcar, I'll close with a smile on my face by quoting the last paragraph from "About the Author" that shows Karl to be a man of many enjoyments beyond just Porsche: *"The Ludvigsens enjoy the East Anglian countryside where they are home to families of mallards, owls, squirrels and hares, as well as two classic cars."* 

—Ed Garten

Car Spy: Secret Cars Exposed by the Industry's Most Notorious Photographer by Jim Dunne CarTech Inc. (2011) cartechbooks.com/ 651-277-1200 222 pages 6" x 9" soft cover 55 b/w and 159 color images, index Price \$19.95 ISBN-10: 1934709816 ISBN-13: 978-1934709818



The author of this book is considered the originator of automotive spy photography. Mr. Leo James Dunne was born in Detroit, Michigan, in 1931. After service in the U.S. Army as a reconnaissance specialist, he attended the University of Detroit earning a degree in industrial engineering. Then working as a journalist, he became the Detroit editor of *Popular Mechanics*. Mr. Dunne became interested in photography, which led to a lifetime career of taking, then selling his undercover photos to many media outlets. He died at home in Grosse Pointe Park, Michigan, in 2019 at age 87.

Every auto manufacturer in the world is highly secretive about allowing any viewing, or any photos taken of their concept vehicles before they themselves deem the model ready for public viewing. They will go to extreme lengths to keep any eyes or cameras as far away as possible. Getting a glimpse or especially a photo of a new design of a competitor's model can be worth millions to a company. This practice is akin to industrial espionage counterintelligence. Most car magazines images were purchased for the purloined shots of a new model, or design innovation. It is exciting to see the future. Many car buffs love to look at some of these older magazines to compare the pictures of "new ideas" being tried to what was actually put in production.

Auto manufacturers have secret, or not-so secret, proving grounds they use to test their vehicles on various road and weather conditions. A General Motors area is the Milford Proving Grounds in Milford, Michigan. One elevated area overlooking the grounds was named "Dunne's Hill" by GM car testers for all the photos taken from this spot. Eventually the area was developed and is now in the middle of a residential community. However, as Dunne puts it in the book, it is still being used by other photographers for spy shots.

Once the prototype car is put on real roads, the company usually covers the car in some type of camouflage. There are directives now to completely cover the car quickly after stopping for a length of time. In the 1960s and 1970s when Dunne first started out, companies weren't concerned with covering their styling revisions. Most uncovered concept cars or prototypes were to be found on neighborhood streets and freeways around Detroit, or Dearborn, or Highland Park, for GM, Ford, or Chrysler cars. That made it easy for anyone to take photos of them, if they were observant. Then in the late '70s, tighter controls were put into place and it became a lot more difficult to spot a prototype.

Dunne tells it all: the funny stories, stories of mistakes, stories of behind-thescenes ways a photo, in say, *Car and Driver* ended up on the front page. There are over 200 color and black-and-white photos to intrigue and delight you, along with the stories of how they were obtained. This book is recommended for anyone who is interested in car design, vintage cars, car magazines, road testing, spying, or just a great read. *—Jeanie Jacobus* 

The Routledge Companion to Automobile Heritage, Culture and Preservation edited by Barry L. Stiefel and Jennifer Clark Routledge (2019) routledge.com/ 406 pages, 7.2" x 10" hardcover 63 b/w images, index Price \$176 ISBN-10: 1138389439 ISBN-13: 978-1138389434

The Routledge Companion to Automobile Heritage, Culture, and Preservation



Edited by Barry L. Stiefel and Jennifer Clark

hat is car culture? This simple question has a complicated answer, and *The Routledge Companion to Automobile Heritage, Culture and Preservation* is a great resource that examines this question along with the moving parts that collectively constitute automotive heritage.

Editors Barry L. Stiefel (an associate professor in the Historic Preservation and Community Planning program at the College of Charleston) and Jennifer Clark (head of the School of Humanities at the University of Adelaide, Australia) bring together professionals with a particular perspective that adds depth to the automotive discussion. The book is divided into six sections and each of their titles gives a good indication of the subjects covered: 1) defining automotive heritage from other forms of heritage studies, 2) conservation, and preservation of historic and associated built environments, 3) the future of the automotive museum, 4) the significance of experiencing intangible automotive heritage, 5) car design, and heritage identity-making, and 6) sustainable futures for personal mobility.

The pages are filled with explanations about the work of organizations and initiatives like the Historic Vehicle Association's National Historic Vehicles Register, the Turin Charter by the Fédération International des Véhicules Anciens and essential efforts to document and preserve automobiles such as the judging guidelines established by the Antique Automobile Club of America and events like Concours d'Elegance.

While the book is geared to address automotive history in general and accelerate the preservation effort in particular, a few of the chapters engage the reader with company and model-specific history and information. For example, a wave is given to Corvette owners, Bentley aficionados get a brief history of company origins, and even the Susita gets a salutation.

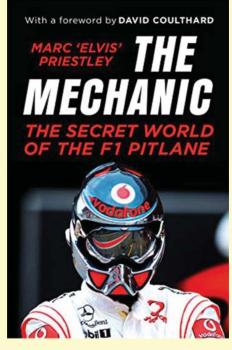
When the rubber hits the road, what is car culture? No single definitive answer can be defined, but I would offer that car culture is a collection of car parts and people assembled in such a way that drives passion, innovation, nostalgia, and optimism. If this defines you, read the book and join the conversation!

-Christopher Price

## The Mechanic: The Secret World of the F1 Pitlane

*by Marc 'Elvis' Priestley* Yellow Jersey Press (2018) penguin.co.uk/ 243 pages, 5"x7.8" softcover 25 color photos, no index Price: \$12.29 ISBN-10: 1787290433 ISBN-13: 978-1787290433

The life of an F1 pitlane mechanic is adrenaline fueled, intense, consuming and ambition driven. Much is written about the drivers and the fabrication of the vehicles. Marc 'Elvis' Priestley provides a different perspective. Providing a first-hand look behind the scenes of what keeps an F1



race car running and drivers winning, his writing is unique and energized. Priestley has spent his career building and maintaining cars for some of the best racers, and this is his life's perspective and memoir. Without the dedication of the pit crew and the team of managers, researchers and fabricators there would not be a race. His writing is fueled with the passion and excitement consistent with the industry. Buckle up and hang on, once you start reading you will be consumed with the passion of F1 and the stories behind the scene.

The book is broken up into twenty-one chapters, moving you from his early career development, fears and mistakes to career advancement. Priestley pulls one through F1 expansion and changes to his own personal growth and learning what it takes to be successful in this unique profession. The color photographs in the center of the book provide a brief glimpse of the racers he supported, the team and the passion and drive within the industry. The high level of commitment is evident on the faces captured. There is a table of contents provided and a foreword written by David Coulthard.

Priestley has provided a unique perspective of how the industry changed over time and the focus of changing the image of the drivers, the sponsors and the crew. With industry and fabrication and personality, Priestley learned how to adapt, focus and maintain a high level of professionalism warranted by McLaren. Priestley writes in an informal style that conveys his excitement and push to succeed, ensuring that he was always working to meet the needs of the driver and his team. Maneuvering through the dynamics of strong-willed personalities became an enormous part of working with an F1 team and he conveys his enthusiasm for winning and success. Essential to being a mechanic is communication. Priestley explains how he developed skills over the years and changed his focus to ensure that safety was paramount, and how he matured and would switch gears, not thinking in context of himself and his role but thinking in context of the team. Any time he writes of a mishap the recurring theme of "is the driver OK?" or "was it something me or my guys did wrong that caused the accident?" illustrates the high-stakes pressure the pit crew was under.

This book not only drove me forward to seek out other F1 mechanic and fabricator books, it also stayed with me as I read others. His writing style pushes you to think, search and find out new information. The book transports and drives the reader to the middle of an experience that most individuals never encounter. It not only provided a look at a unique and essential part of the sport but fueled my desire to seek further experiences and information in this niche of an exciting and ever-changing race profession.

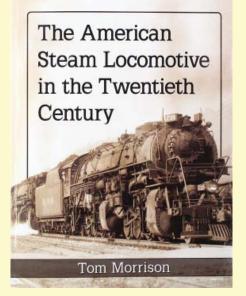
—D. Naumann

## The American Steam Locomotive in the Twentieth Century

*by Tom Morrison* McFarland & Company (2019) McFarlandpub.com/ 800-253-2187 636 pages, 8" x 11" softcover 455 b/w images, 130 charts, chapter end notes, appendices, bibliography and index List Price: \$49.95 eISBN: 978-1476627939 ISBN-10: 1476679002 ISBN-13: 978-1476679006

Your commentator is aware that a book with steam locomotive in the title is not automotive history, per se. Still this stunningly comprehensive book is one that readers of this *Journal* should be aware of for two reasons.

First, a number of you reading this may share an interest in and fascination with the topic. Second, those engaged in exploring the intermingled evolution of the various modes of transportation, their societal and economic impact on one another, and on the



broader society, can gain much from what's written in this book.

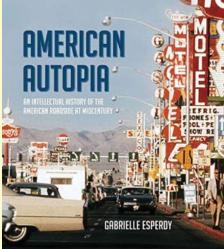
In fact, as author Tom Morrison points out, the automobile had a direct effect on steam engine development, and subsequently the internal combustion engine, especially the diesel locomotive for when the train "load" was a passenger-freight mix the higher speeds demanded by competition for passengers was easier to achieve as total weight was less. As railway passengers turned to autos then buses, the railways relied more and more on freight. The greater weight drove development of heavier, more powerful steam engines. Moreover, the nascent automobile was destined to ultimately lead to the end of steam to power locomotives as its internal combustion engine was developed and improved.

Making Morrison's writings all the more worthwhile are the detailed and careful annotations throughout the entire book, leaving a clear trail to origins and sources of all information.

Morrison's words, as he explains what motivated him to write the book, also lend insight into his writing style. He had always wanted to find—and never had—"a real, thorough-going, grimy, gritty history of those gigantic locomotives, the people who built and operated them and the industry (and times) in which they flourished and became extinct." Thus he set out to write it himself; and in the opinion of this commentator, he excelled! If you've even a modicum of interest in steam locomotives and their concomitant history, do not deny yourself a copy of this book.

—Helen V Hutchings

American Autopia: An Intellectual History of the American Roadside at Midcentury by Gabrielle Esperdy University of Virginia Press (2019) upress.virginia.edu/ 800-848-6224 384 pages, 7" x 8" hardcover 75 b/w and 16 color images, endnotes, index Price: \$49.50 ISBN-10: 0813942950 ISBN-13: 978-0813942957 (Cloth) ISBN-13: 978-0813943107 (Ebook)



E arly to mid-twentieth-century America was the heyday of a car culture that has been termed by some as an "automobile utopia." In *American Autopia*, Gabrielle Esperdy examines how the automobile influenced architectural and urban discourse in the United States from the earliest days of the motorcar industry up through the aftermath of the 1970s oil crisis. Paying particular attention to developments after World War II, the author creates a narrative that extends from U.S. Routes 1 and 66 to the Las Vegas Strip to California freeways, with stops at gas stations, diners, main drags, shopping centers, and parking lots along the way.

While the book addresses the development of auto-oriented landscapes and infrastructures, *American Autopia* readers must appreciate that this is not a conventional history nor is it just another among the scores of "coffee table books" that have been available for years in commercial book stores. Rather this is a true intellectual history, where the reader is offered a strong and detailed exploration of the wide-ranging evolution of car-centric terrains and builtenvironments by viewing how they were scrutinized by diverse cultural observers in the middle of the twentieth century.

Esperdy draws on and reflects upon work published in the popular and professional press. The book is generously illustrated with evocative images and shows how figures as diverse as designer Victor Gruen, geographer Jean Gottmann, theorist Denise Scott Brown, critic J.B. Jackson, and historian Reyner Banham first constructed *autopia* as a place and an idea. The result is an impressive and evocative intellectual history and interpretive roadmap to what might be termed The United States of the Automobile. This is a singular book about under-examined evidence. While many of the cultural artifacts that the author discusses will be familiar to readers of the SAH Journal, her real subject is the intellectual matrix operating in the background of these artifacts, tying elements together and capturing the cultural imagination.

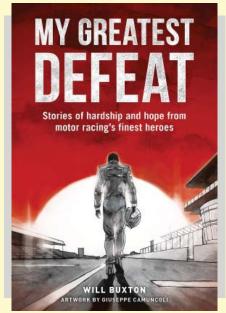
As is the case with her other works, in American Autopia the author has developed an extraordinary book that expertly illuminates the period of 1945-73. Moreover she provides a prodigiously researched and nuanced reading of a broad array of sources and voices in the history of the U.S. roadway. Importantly, she has crafted a comprehensive, well illustrated, and masterfully researched account of the impact of the motorcar on the American built environment amid the constantly evolving American attitudes toward the road and the artifacts found among those highways.

The author is a professor of architecture and design at the New Jersey Institute of Technology and previously authored *Modernizing Main Street: Architecture and Consumer Culture in the New Deal* (2008). Her earlier work has examined the intersections of architecture, consumerism, and modernism in the metropolitan landscape, especially in the United States in the twentieth and twenty-first centuries. She has been especially interested in minor or everyday buildings and in the ways that social, economic, and political issues have shaped built environments, both historically and today.

This is not an easy read; rather it is a demanding one. However, for those readers who are especially interested in the ways and means through which the motorcar has intersected with built culture, this book is well worth your time and effort. —Ed Garten

#### My Greatest Defeat: Stories of hardship and hope from motor racing's finest heroes by Will Buxton

Evro Publishing, UK (2019) evropublishing.com/ 612-344-8100 336 pages, 6<sup>1</sup>/<sub>4</sub>" x 9<sup>1</sup>/<sub>2</sub>" hardcover 20 b/w sketches of each driver, no index List Price: \$29.95 ISBN-10: 1910505404 ISBN-13: 978-1910505403



From the automotive historian's point of view this book has a limited, or perhaps more accurately, a focused usefulness.

The content is best described as "uneven" but that can't entirely be attributed to first-time book author, Will Buxton. Rather, said the unevenness results from the input and replies of those men who responded to Buxton's request for interviews regarding difficult moments in their career. Some respondents proved to be more thoughtful, more introspective, or just better able to express their thoughts than others.

While that unevenness was perhaps unavoidable, for a historian working on a paper or article on one of the series' and/or drivers, the observations and experiences presented may be helpful or insightful. Read the book's title—and especially the subtitle—carefully, for replies are not always about a race or even an on-track incident. By the time Buxton had recorded and transcribed the numerous interviews he decided rather than write a book in his own words to simply let the conversations flow onto the page, "transcribed as they unfolded."

The twenty drivers whose interviews are shared on the pages of *My Greatest Defeat* by Will Buxton may be found at the publisher's website. *—Helen V Hutchings* 

# Nissan Z: 59 Years of Exhilarating Performance

*by Pete Evanow* Motorbooks (2020) quartoknows.com/ +1 800-328-0590 256 pages, 9½" x 11" hardcover 12 b/w, 160 color images, appendix and index Price: \$45 / £30 ISBN-10: 0760367132 ISBN-13: 978-0760367131

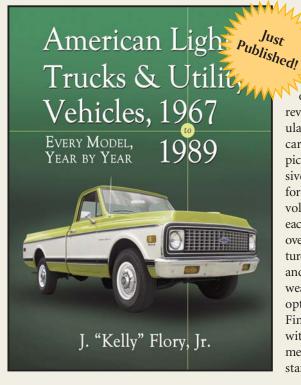
Want or need a straightforward reporterly recounting of the history of Datsun-cum-Nissan in North America? This book provides just what you're seeking, along with a couple of bonuses. Don't let the title mislead you for this book really does provide an accounting of Japan's oldest car manufacturer's (established in 1911) entry into the North American marketplace in 1957 and continuing to present day. Of course the sale of its vehicles in America really blossomed with the 1970s introduction of the 240Z.

Those bonuses are two chapters discussing subjects not typically covered—much less in great detail—by auto- or marquehistory books. Author Paul Evanow presents one chapter about "The Car-Hobby Culture" and another on "Today's Z Market— New, Used and Classic." "The Car-Hobby Culture" profiles several Z-centric collectors and offers information on their outstanding collections, then lists and shows some special collector Z models.

"Today's Z Market" opens with observations on BringATrailer's internet auction site becoming as influential on the marketplace as the big name auction houses and then goes on to profile some of the more notable Z restorers. This chapter then goes a bit further as it also presents some of the Z modifiers and their creations.

Appropriately the book concludes with words and photos of the 2020-model year Z, the car that will be forever designated "The 50th Anniversary Z," which is also the chapter title. Lastly is "Moving Forward and Beyond" in which Nissan's vice-president of Global Design Alfonso Albaisa shares his perceptions of what Nissan's Z should be going forward.

-Helen V Hutchings





<sup>¶</sup>rucks 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 hardcover (8½ × 11) 1300 photos, appendices, bibliography, index ISBN 978-0-7864-7540-7 Ebook ISBN 978-1-4766-2652-9

### In Memoriam

### Jeffrey I. Godshall (1941–2019)

utomotive designer, historian and **A**Friend of Automotive History *Jeffrey* Irvin Godshall passed away on December 11, 2019, after a period of declining health. He was born in Aliquippa, Pennsylvania, in January 1941. When he graduated from Aliquippa High School in 1958, his yearbook entry listed his interests as "designing cars" and his ambition "to attend college and become an automobile designer," both of which he achieved in full. Upon graduating from Carnegie Mellon University, he joined the Chrysler Corporation design studios in 1963, retiring as Senior Design Manager of the Product Design Office 45 years later. During that time he participated in both interior and exterior design projects, from Dodge muscle cars in the 1960s to the PT Cruiser at the end of the 20th century. His design team's PT Cruiser interior received plaudits from both the public and the press.

An inveterate car guy, he was an early member of Autoenthusiasts International, a group of literature aficionados and collectors. This led naturally to a membership in SAH, as it did for many collectors of that era, and he became the Society's 99th member in May 1970. As historian and practicing designer, he had insight unavailable to most of us, as he worked with the product planners, engineers and designers of the '60s, '70s,



'80s, '90s and '00s. He recorded much of that experience in a vast number of articles in respected publications like *Automobile Quarterly, Special Interest Autos* and *Collectible Automobile*.

His historic interests were awakened by John Bentley's *The Old Car Book*, which he was given as a boy. Particularly taken with Cord automobiles, in particular the "coffin nose" models, he soon learned of the Hupp- and Graham-built cars that were manufactured with Cord tooling. This led to in-depth study of both those orphan makes, and further interested him in Raymond Loewy's work for Hupp, particularly the Aerodynamic models of 1934. His Graham interest led him to the three Graham brothers and their varied automotive interests.

From 1976 to 2008 Jeff was awarded three Carl Benz Awards by the Society and

one Award of Distinction. He knew not only what happened but why, and his training and experience made him an astute critic of the automobile. He knew what lines were "right" and why. One of his most insightful observations was that best version of a new automobile design comes usually in its introductory year, when the concept is pure and not saddled with minor tweaks made simply to differentiate it from the past. I was pleased, though, when he agreed with my pronouncement that it did not apply to the first-generation Ford Falcon, which was much too plain and was actually improved by the gaudier 1963 iteration. It was fitting, then, that he was named a Friend of Automotive History in 2018.

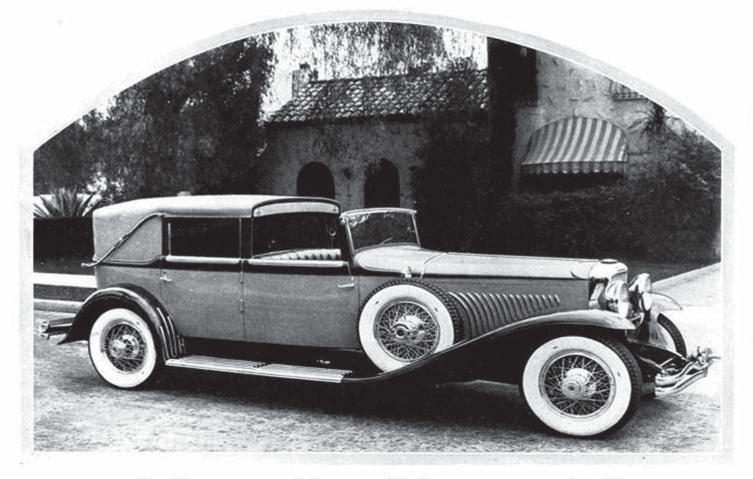
He was sometimes dismissed by readers as an "armchair enthusiast," because he didn't actually collect cars or restore them. What the critics missed was the fact that he created much of the history of the cars they later collected. He was active in the enthusiast community in other ways, including Chief Judge for the annual Eyes On Design Automotive Design Exhibition at the Edsel and Eleanor Ford Estate at Grosse Pointe Shores in Michigan. He also served as narrator at the Henry Ford Greenfield Village Motor Muster; and starred as Chief Narrator for the annual Orphan Car Show held in Ypsilanti, Michigan. He also served on the Board of Trustees for the National Automotive History Collection at the Detroit Public Library.

In addition to all of that, he was a good friend and a pleasure to be with. We all miss him.

—Kit Foster



Inspired by our Duesenberg coverage in this issue, here we present the first production Straight Eight "Model A" Duesenberg (chassis 601) photographed by the editor at the 14th annual Boca Raton Concours d'Elegance on February 9, 2020, which featured the 100th anniversary of the introduction of the Duesenberg Straight Eight.



# A Supreme Test of Engineering Skill

Duesenberg Crankshaft Designed to Meet Requirements of 265 H. P. Motor

OU may or may not be interested in machinery, but you are tremendously interested in knowing that all parts of your car are so perfectly built that you are completely freed from worry about the possibility of trouble, and are

insured smooth, quiet, highly efficient performance at all times.

MUCH OF THE RESPONSIBILITY for your car's continuously successful performance rests upon the engine crankshaft. This important part of the motor must be tremendously strong and rigid to withstand the terrific power thrusts it receives. At the same time it must be so perfectly balanced that it smooths out the slightest power vibration.

As THE "BACKBONE" of its 265 Horsepower engine, Duesenberg has the most remarkable crankshaft ever built into an automobile. Drop-forged, of the finest double heat-treated chrome nickel steel, 2<sup>3</sup>/<sub>4</sub> inches in diameter; providing extreme strength and

rigidity equal to any strain. Mounted on five main bearings of unusual size, the shaft is counter-weighted and statically and dynamically balanced, to the smallest fraction of an ounce.

ALSO, THE CRANKSHAFT carries an entirely new type, mercury vibration dampener, especially designed by Mr.



Duesenberg. Two cartridges, each containing 16 oz. of mercury, are attached to the cheeks of the shaft. Since mercury seeks its own level more quickly than any other known element, any periodic vibrations set up in the shaft are counteracted immedi-

ately by the movement of the mercury in the cartridges. This unique device offers one of the reasons why the most powerful motor car engine built, delivers its power so smoothly and quietly at all speeds and under all driving conditions.

HERE IS ONLY ONE of many notable instances in the construction of this car, in which the creative pioneering genius of Fred Duesenberg has successfully solved new and trying engineering problems.

THE SAME painstaking skill used in designing an adequate crankshaft extends to all parts; the same passion for perfection is carried even to seemingly minor features and to fittings and appointments. For a Duesenberg's superiority over all other

cars consists in the extent to which it excels them in every detail; that is what makes it The World's Finest Motor Car.

A DUESENBERG owner pays no premium for pride in a name. A Duesenberg is marketed on the same basis as the most popular-priced car, Dollar for Dollar Value, DUESENBERG, INC., INDIANAPOLIS, IND.

