

SAH Journal



ISSUE 284
JANUARY / FEBRUARY 2017

\$5.00 US

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Billboard

Awards: Each year, the Society recognizes significant contributions to the publishing, documentation, and preservation of the worldwide history of the motor vehicle. Awards are given for publishing in print (books, articles and magazines) and non-print media (film, video, audio, websites, etc.).

In addition, awards are made for papers authored by undergraduate and graduate-level students at educational institutions. Service awards are presented for the preservation of archives and for exemplary service to the cause of automotive history. Nominations are received in the spring of each year and awards are presented at the Society's annual meeting, held during October. For details and deadlines, please go to the website, autohistory.org, and click on the "Awards" tab.

Front cover: Rétromobile has something for everyone, and the far corners of that scope are captured here from the Artcurial auction preview. On top, we have the Delahaye 235 coupé by Chapron (818080). There was no year in the description, but it was indicated that production ran from 1951 to 1954. The car was part of the Baillon collection auctioned in 2015, where it sold for €119,200. It returned to Artcurial with the same estimate of €20,000-25,000, but this time it sold for €83,440. To the left is a 1967 Honda S800 coupé (1003811) that sold for €39,336, and on the right is a 1970 Ferrari 365 GT 2+2 (13339) that sold for €226,480. On the automobilia side, there's functional art like this furniture made of Jerry cans by French artist Hervé Nys. For more, see page 8. *Cover and all Rétromobile photos by Kit Foster.*

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!*

Final Sale of Automobile Quarterly Back Issues: Have you ever wondered what happened to all the unsold back issues of *Automobile Quarterly* since the publisher ceased operations in 2012? SAH has tracked them down: visit autohistory.org and there you will see what is still available and where you can obtain these back issues. The SAH has been offered a part of the proceeds from this sale, so your purchase also helps support the SAH. After reviewing the website, any questions could be directed to Louis Fourie at: l4ie@telus.net.



Back cover: cover of *l'Équipement Automobile Revue Mondiale De La Carrosserie* No. 274 (July-August 1951) featuring a Delahaye 235, drawn by Philippe Charbonneaux (1917-1998), the French industrial designer primarily known for automobile and truck design. (Source: lesdelahaye235.blogspot.com/p/la-publicite-et-la-235.html)

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 |

Note: 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.

SAH Journal

ISSUE 284 • JANUARY/FEBRUARY 2017

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



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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

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Join, renew and more right on-line!

President's Perspective

Just yesterday I took my 1964 Studebaker Daytona out of storage for its spring cleaning, oil change, chassis lubrication and first drive of the year. This annual ritual is the true first day of spring in my book and was especially delightful as it did not require operating the heater or defroster. Of course, the forecast for later this week calls for snow, which is just a standard spring for northern Indiana, but will probably put a dent in my spring Studebaker drives!

My personal automotive history library received a welcome addition recently when my parents gave me their entire collection of *Special Interest Autos* and *Automobile Quarterly* publications. My father, Buzz Beckman, was a subscriber to both periodicals since the get-go, and I am slowly making my way through these fine works. I learned that a



Studebaker family member once owned the mystical Phantom Corsair automobile, the Rust Heinz creation that currently resides at the National Automobile Museum in Reno, and just completed a fascinating article on the Davis.

In more pedantic pursuits, I recently completed a research project on Studebaker Champion cylinder heads. What began as a

fairly simple quest to determine combustion chamber variations took a turn down the rabbit hole resulting in a data avalanche of very narrow focus and, likely, interest. Studebaker used no fewer than fifteen different cylinder heads on the Champion six during its 1939-1960 run in L-head configuration. In compiling these data, I was reminded of a National Public Radio host's use of the phrase "Precise Irrelevance." He wasn't talking about Champion cylinder heads (I think it was camshafts) but it fits nicely, nonetheless.

In just a few weeks the SAH Board will be gathering at the Gilmore Museum in Hickory Corners, Michigan, for its annual spring meeting. Thanks are due to *Ed Garten* for organizing this congregation and the fine folks at Gilmore for their hospitality. Should you have any issues or concerns regarding the SAH, please contact a board member. Even if you don't, please feel free to reach out and say hello—we'd love to hear from you!

—Andrew Beckman

Wheels in Time



This photo is the first "Wheels in Time" photo: an intermittent feature where an image that resonates with an article in the issue—or one that is interesting on its own—is posted. It could be identified, or a "mystery image" with a need for member feedback to identify.

This photo of a U.S. Senator is sourced from: commons.wikimedia.org/wiki/File:SenatorWetmoreInAutomobile_retouched.jpg
The description read: "Senator George P. Wetmore of Rhode Island in a Krieger [sic] automobile, circa 1906. Senator Wetmore is in back with woman, presumably his wife. A driver and footman are in front of vehicle."

"The Krieger was the best-known and most widespread French electric car, being used for taxi work as well as a private car. Louis Antoine Krieger (1868-1951) was an electrical engineer who formed his company in 1897, backed by a wealthy Cuban-born friend, Severiano de Heredia." [Source: *The Beaulieu Encyclopaedia of the Automobile: Volume 2*, ISBN: 978-0117023192]

This Krieger resonates with the one photographed at *Rétromobile* as seen on page 8.

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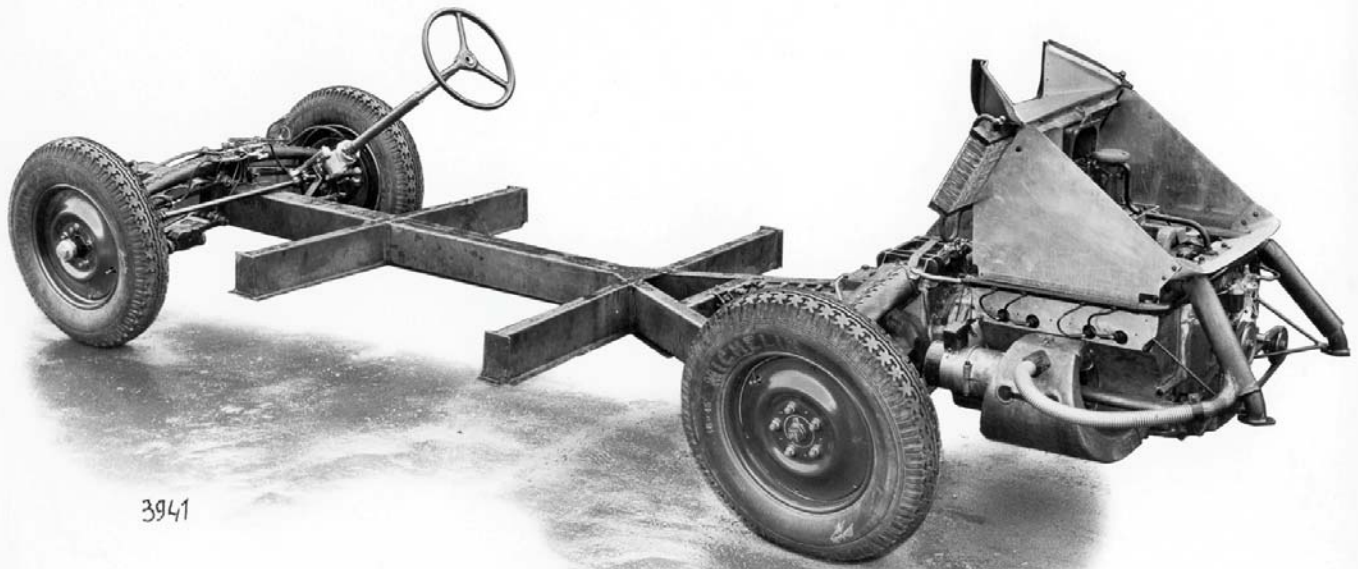


Fig. 48.

HISTORICAL RESEARCH AND FORENSIC EVALUATION INFORMS THE RESTORATION OF A 1934 TATRA T77 (PART II: THE CHASSIS)

Editor's Note: In Part I of this article (see SAH Journal #283) the author discussed the various aspects of restoring the body of this Tatra T77. As explained in Part I, the aim here is to illustrate how the discipline of automotive restoration continues to evolve (through the perspective of a specific case), particularly in the increased attention to preservation, and the range of questions that should be explored to define the nature and degree of the restoration that is to be undertaken in a given case. For more on David Cooper and Cooper Technica, visit: coopertechnica.com.

The chassis of the T77 [Fig. 48.] is unique and very different from anything else built at that time. Tatra built a central rect-

angular tube by welding two “C” channels together to form the box. Fig. 49. The “C” channels separate into a “Y” shape at the rear to extend on either side of the engine. Fig. 50. [p 5] The “Y” channels are boxed for strength. There are four outriggers to hold the body sides and support the floors.



Fig. 51.

Fig. 51. At the front of the chassis, one space frame of formed sheet metal supports the cowl and another, in the rear, supports the firewall separating the engine from the passenger compartment. Both space frames include the structural inner wheel arches. The tube of the chassis, which contains the heater duct from the engine to the passenger compartment, has internal steel reinforcement plates to brace the front suspension. The steel chassis was light and minimal, yet it provided sufficient rigidity to support the steering, front and rear suspensions, and drivetrain.

Fig. 52. The original floors of the car were made of high quality birch plywood



Fig. 52.

that could be replaced when needed. Remaining samples reveal that this plywood was made in one millimeter thick plies without knots. A previous repair shop decided to “improve” the car by replacing the wood floors with steel floors welded in place. This was not a good idea. If Ledwinka had wanted steel floors he would have made them. But he did not want extra rigidity in this area. The wood floors, floating in channels, allowed the outriggers to flex with the body. Fig. 53. Welding the replacement steel floors damaged and warped the steel in all of the



Fig. 53.



Fig. 49.

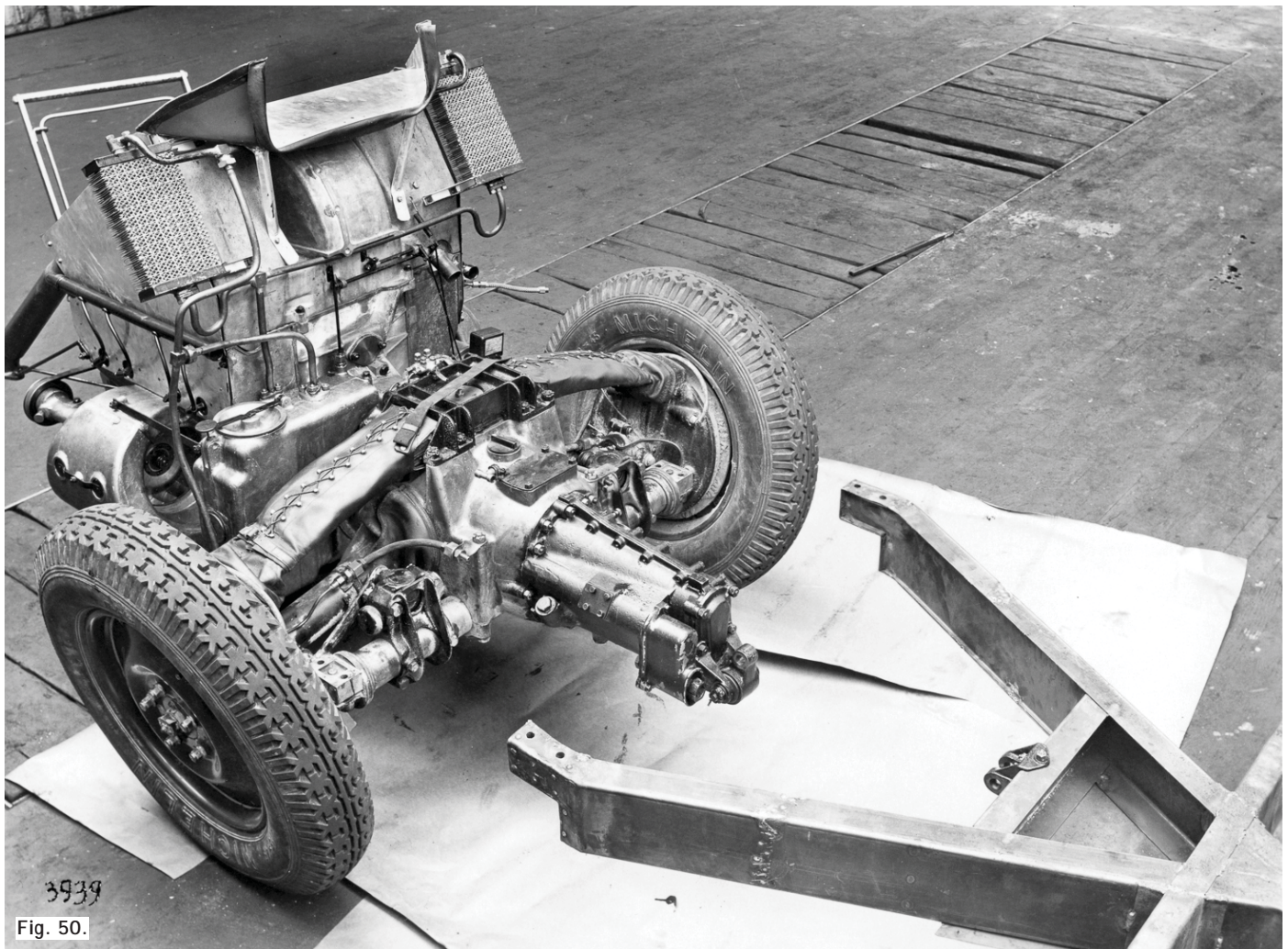


Fig. 50.

outriggers and the central “C” channel. Fig. 54. We carefully cut the replacement steel floors out of the car and considered how to repair the damage.



Fig. 54.

An important part of our job as responsible restorers is to study the car forensically in order to reveal its history. In this case, it was evident that our T77 had been in an accident early in its life. The hit was on the front wheel and front suspension and carried through to the rear body and chassis. We know it happened early, because there is very little wear on the suspension parts, suggesting that the car had been parked for much of its existence. While the car took a hard hit, the force was directed to several areas and most of the chassis was still in excellent condition. The rustproofing technique Tatra

used on the steel was good enough to prevent rust for more than 80 years. The only rusted areas were where repairs were made after the accident.

Fig. 55. In the accident, the central chassis was bent at the front suspension mount and the rear “Y” area was mis-aligned.



Fig. 55.



Fig. 56.

Fig. 56. The force went through the suspension “A” arms and broke the cradle that holds the front suspension. This cradle was crudely rewelded in the repair after the accident. Fig. 57, 58. Other problems were revealed as we



Fig. 57.

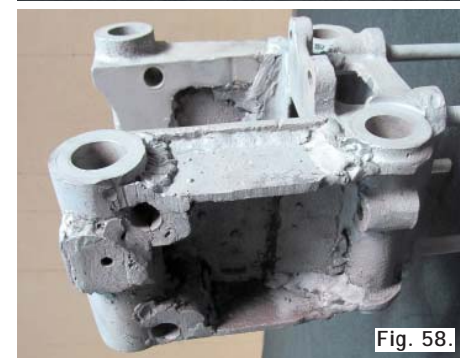


Fig. 58.



Fig. 59.

started to disassemble the chassis for restoration. We took thousands of photographs to document these problems and guide their solutions.

How do we restore the chassis while maintaining both its originality and functionality?

We were able to obtain the original chassis drawing from the Tatra factory, showing all dimensions. We now knew what the chassis was supposed to be, but we had to restore our chassis to these dimensions. Our chassis was misaligned and cracked from the accident damage. To actually make the repairs we mounted the chassis to a precision surface plate, which assured the chassis was held in a flat plane. Fig. 59. Since the main repairs were mostly to the underside, and this



Fig. 60.

was the most visible surface, we welded the chassis upside down on the surface plate. It made sense to work this way.

We started in the rear, which we suspected had less damage. To realign the rear chassis we carefully removed the box sections from the “C” channel. Fig. 60. Underneath



Fig. 61.



Fig. 62.

the box section we discovered a steel patch covering a large tear in the metal. Fig. 61. 62. Clearly, this area that locates and mounts the engine had twisted in the accident.

Once the box section and patch were removed, and the “C” channel was more flexible, we hydraulically pressed the rear “C” channels back into their correct location. Even though it departs from strict originality, my decision—made with the agreement of my client—was to strengthen any area of the chassis that had been damaged or compromised, but to do so in a way that cannot



Fig. 63.



Fig. 64.

be seen or detected. Fig. 63. As the original steel was weakened, we made a decision to strengthen this area on both sides by adding an additional internal vertical web hidden inside the “C” channel box. This added considerable rigidity without being visible. Fig. 64. Ledwinka was concerned with every

gram of weight. We, on the other hand, chose to gain extra reliability and safety at the cost of a little added weight. Every decision in the restoration process relies on the restorer’s judgment.

Why do we believe that in this instance we could depart from originality?

It is our responsibility to make the car function properly under all normal driving conditions. If we have a concern that some original steel or other material has been



Fig. 65.



Fig. 66.

weakened, then we have an obligation to repair or strengthen it.

Fig. 65. In the front section of the chassis, the damage was more serious. Fig. 66. We carefully removed a lower plate from the underside of the chassis and revealed a serious crack in the rectangular tube just at



Fig. 67.

the mounting area for the front suspension. Fig. 67. The repair of this section done at the time, though crude, was the best that could have been done without removing the body from the chassis.

Fig. 68. We decided to cut the chassis tube and remove the compromised section altogether. This area, which had been torn,



Fig. 68.

bent, straightened and welded, was no longer capable of supporting the front suspension. We fabricated a replacement for this section, with a new rectangular channel made just as the original. To do this, we made dies to duplicate the shape and curves of the “C” channel and then hydraulically pressed new “C” channels using similar steel. Fig. 69. We



Fig. 69.

welded the “C” channel together with the same type of welds that were used by Tatra originally. We were able to preserve much of the original suspension mounting brackets that are attached to this tube section. As with the rear chassis box sections, we built an internal support that considerably—but invisibly—strengthens the front section, especially at the joint. Fig. 70, 71.

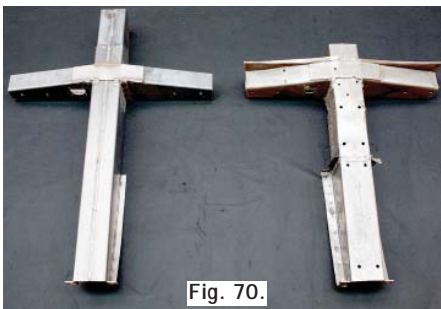


Fig. 70.



Fig. 71.

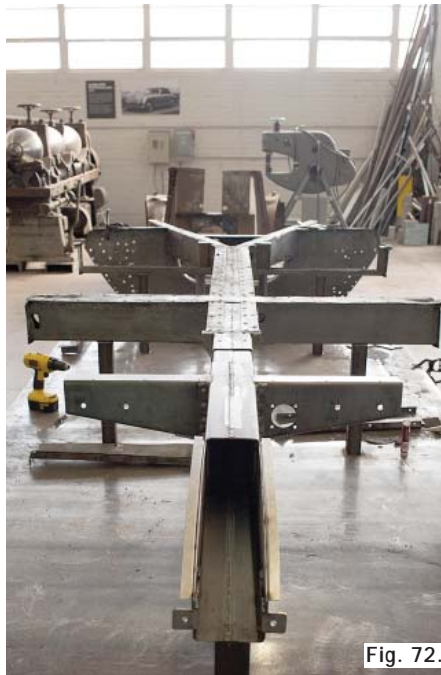


Fig. 72.

As the original front section still has sheet metal remnants attached to its flanges, we made the new section with the flanges sized exactly as original. The riveted area on the old section was a repair. We made the transverse members that support the front suspension a little longer because the original had been shortened and modified when it was repaired after the accident. We cut them to match the factory drawing. Fig. 72. The long internal box inserts into the original chassis tube locating the section precisely. It will be welded in place when other work is completed.

Should your restoration work be visible or not?

One point of view suggests that any repair should be clearly evident so that future historians can readily discern what is original and what is restored. I disagree. Despite the best of intentions, with that approach you end up with something far different than the original.

Instead, I believe that we have the responsibility to bring the car back to its original state, in function as well as appearance. In the chassis repair, for example, we now have a splice in the chassis where there was no seam originally. We use modern welding techniques that can be filed smooth and hidden to make this seam invisible. On the other hand, where we are replacing original welds, which are visible on the chassis, our new welds all match the type and style of Tatra’s original work.

Our next step will be to refabricate the cradle that holds the parallel “A” arms of the front suspension. The original part was cast and it failed in the impact the car suffered early in its life. Instead of casting a replacement, we will machine the cradle from billet, which is stronger and less brittle, but will maintain a similar look, so our change will not be noticeable. We will then rebuild the space frame sections in both the front and the rear, using new steel in the same gauge to replace the damaged sections.

Conclusion

What principles of responsible restoration have been revealed in our work on the Tatra?

- Preserve when possible.
- Restore when necessary.
- Restore responsibly, with integrity to the original.
- Learn everything you can about the car before you start, including history, engineering, materials and construction techniques.
- The car will talk to you: spend time on forensics, learning everything you can from the car’s condition.
- Understand the design so that you can restore it properly and sympathetically.
- If possible, use the same materials and original construction techniques.
- Use modern technology to assure accuracy and authenticity.
- Make changes from original only for reliability or safety, but do it discreetly. It is acceptable to make minor mechanical engineering changes to eliminate old problems. We have the luxury of hindsight.
- Photograph and document everything you do.

We restorers should not make the car better than new—instead, it should be as it was when new. Our approach demonstrates one way to restore responsibly, maintaining the most important original components, while still making the car both functional and a representative survivor of the magnificent car Ledwinka designed and built in 1934.

—David Cooper

Photo Credits:

Fig. 48, 50: Courtesy of Technical Museum Tatra, Koprivnice, Czech Republic
Fig. 49, 51-72 © David Cooper, 2016



1906 Krieger Landauet Electricque has an electric motor on each front wheel.

RÉTROMOBILE 42 MORE ROOM, LESS AWE

Rétromobile, Europe's premier indoor old-car event, continues to evolve. This year, its 42nd, it was larger, having grown into adjacent buildings at the Paris Expo complex at Porte de Versailles. That said, it was also less spectacular than recent shows, at least to an aficionado of the arcane and unusual.

A major theme was the 70th anniversary of Ferrari as a marque, celebrated with a display covering the entire period (most of the cars in red). On the extended walkway between Buildings 1 and 2 was a large display of Group B rally cars. The centenary of World War I continues to unfold, so there was an exhibit of early French tanks from the Saumur Tank Museum. Finally, in the west corner of Building 1 were several treasures from the underappreciated Musée National de la Voiture et du Tourisme at Châteaux Compiègne. This year's display was dedicated to French auto pioneer Gustave-Adolphe Clément, and comprised cars from his career, including a Stirling, a Gladiator and several Bayards. While instructive, Clément's cars lacked the overall impact of last year's immense steam carriages of Amédée Bollée from the same museum. In fact, the most dramatic vehicle in this year's display was not a Clément at all, but a 1906 Krieger Landauet Electricque, in effect a horse-drawn landauet with electric motors on each front wheel.

The overall layout of the show was revised to place the car clubs in the far reaches of Building 3, beneficial in having most of them together but unfortunate in that some visitors may never have found them. Some clubs, those devoted to models of current manufacturers, continue to be hosted on their parent companies' large pavilions, although there seem to be fewer of these than in the past. The French "Big Three," Renault, Citroën and Peugeot, were there in force, as were Mercedes-Benz, Porsche (represented by the

French distributor) and Jaguar Land Rover (promoting Land Rover Heritage, which is now into reproducing components for classic models). Alfa Romeo has been present for several years, and this time returned as part of a large display by parent company Fiat. Missing this year was VW's Czech subsidiary Škoda, which has had historical exhibits up through 2016.

As always, there are big dealer displays, book and literature stalls and hectares of model car vendors. Although they are few in number, there are still some vendors of old car parts: no rusty metal, but brass lamps and radiators are available if you can afford them. Artists have their own village, the most dramatic examples being real-life sculpture. Interestingly, the Ferrari-engine coffee tables have been joined by more affordable furniture made from jerry cans.

Rétromobile season is the auction-goers delight, with sales for three nights running. RM Sotheby's led off on Wednesday at Place Vauban with a Porsche-heavy catalog. Sales pretty well tracked estimates, a 1934 Alfa Romeo Tipo B P3, keynoting the evening at €3,920,000 (including buyer's premium). Bonhams followed on Thursday at the historic Grande Palais, where the top sale was €2,012,500 for a 1935 Aston Martin Ulster

Sports Two-seater. The official Rétromobile auctioneer is the French house Artcurial, with a sale at the show on Friday. There was nothing like the immense barn-find Baillon collection of 2015, but at least one of the Baillon cars returned. A Delahaye 235 Chapron coupe, it claimed to retain its original barn dust, but sold for €83,440, two-thirds of the 2015 hammer price (see cover photo).

Rétromobile 2018 will run from February 7th to 11th. That's not April in Paris, but off-season rates are reasonable and the weather is better than many North American climes. If you've never been, you really should check it out.

—Kit Foster



1901 Stirling, left, was built in Britain under Clément license. The adjacent 1904 Bayard was constructed in France by Adolphe Clément's second automobile company.



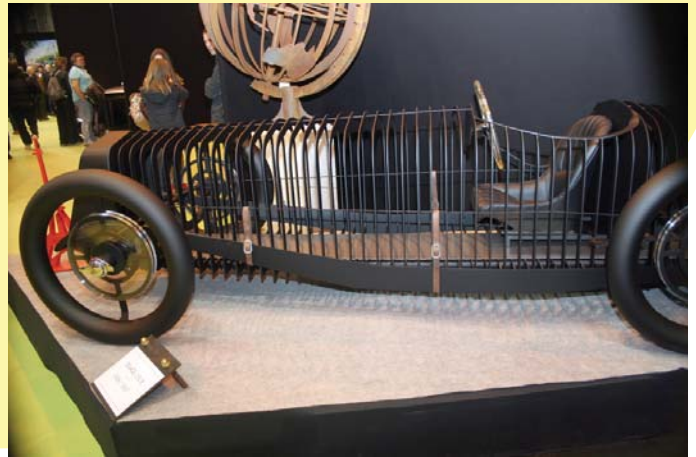
Fiat Abarth Bialbero speed record car was a highlight of the Italian manufacturer's display.



Let's all drive: Vedette child's car has steering wheels for four.



Form follows function: Gabriel Voisin hewed to a stoically functional aesthetic, embodied in this C11 Charteorum.



Above and right: Now you see it, now you don't. Delage sculpture was form without function.



AISA

Italy has a lot to share about the history and development of the automobile. Most Italian historians and experts are members of **Aisa**, the Italian Society of Motoring Historians.

Since 1987 **Aisa** has promoted and published motoring history researches and documents, focused on Italian topics and their Europe-wide contributions.

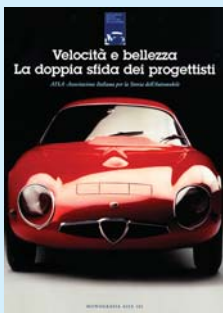
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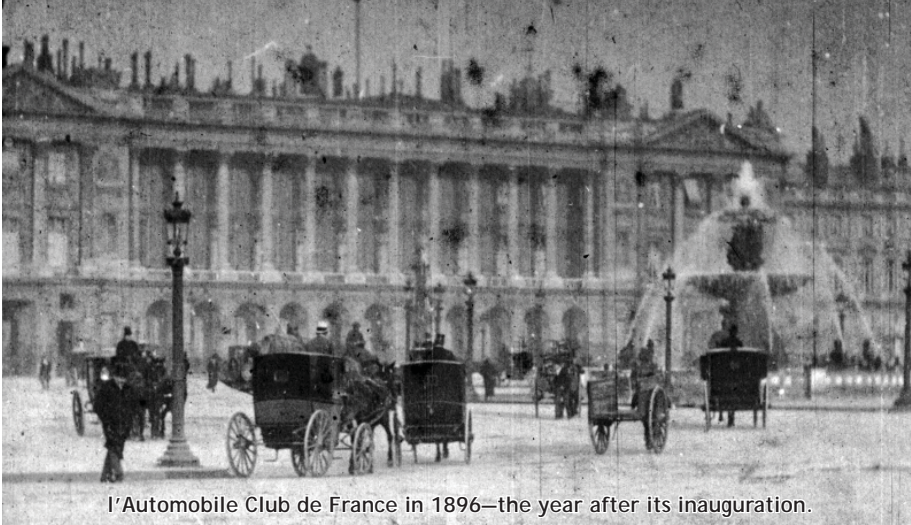
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A sample of Aisa booklets





l'Automobile Club de France in 1896—the year after its inauguration.

SAH EUROPEAN MEETING XXII THE AUTO HISTORIANS' DINNER IN PARIS

Thirty-five members and guests gathered at the Automobile Club de France in Paris on Tuesday, February 7, 2017, for the Society's annual European Meeting and dinner. The Automobile Club, organized in 1895, is the world's oldest motoring organization. Although a bit smaller than last year's event, this meeting was more cosmopolitan, with attendees from France, the United Kingdom, United States, Italy, Denmark, Brazil, Switzerland, Germany, Finland, India and, for the first time, Iran. Renovations to the Automobile Club's headquarters had

progressed sufficiently that the view of the Place de la Concorde and the spectacular cityscape of the City of Light was restored. Sadly, long-time advocate, co-organizer and Friend of Automotive History *Malcolm Jeal* was missing from our midst, having passed away last July.

Three awards for books in the field of automotive history were presented. The English-language *Squire the Man, the Cars, the Heritage* received the Nicolas-Joseph Cugnot Award, accepted by author Jonathan Wood. Roy Palmer, representing Classic

Motor Cars, Ltd., the consortium of Squire owners who commissioned the work, accepted the publisher's award.



For the philatelists among us, this stamp was issued to celebrate the ACF's centennial.

The Cugnot Award for books in a language other than English was presented to Borzou Sepasi for *Iran Royal Garage*, a detailed history of the cars of Mohammad Reza Pahlavi, the late Shah of Iran, written in



An early gathering outside the ACF, see: www.automobileclubdefrance.fr/archives-historiques

Farsi. An Award of Distinction went to Neils Hamann for *Wiesmann: Power & Passion*, the story of a boutique German manufacturer that built sports cars at the turn of the 21st century from mainly BMW components. A German-language book, it was published by Schneider Media.

Many of those at the meeting then attended *Rétromobile*, Europe's largest indoor old car event, which opened the following morning and ran for five days.

—Kit Foster



Author *Jonathan Wood*, right, receives Cugnot Award from *Kit Foster*. Giuseppe Valenza photo.



Author *Niels Hamann* accepts Award of Distinction for *Wiesmann: Power & Passion* from *Frank Gump*. Peter Moss photo.



Arthur Jones, right, presents Cugnot Award for *Iran Royal Garage* to author *Borzou Sepasi*. Giuseppe Valenza photo.



Valentin Schneider, left, accepts Award of Distinction on behalf of publisher *Schneider Media*.



Roy Palmer, right, accepts publisher's award for *Squire the Man, the Cars, the Heritage*. Giuseppe Valenza photo.

Book Reviews

Hard Luck Lloyd: The Complete Story of Slow-Talking, Fast-Driving Texan Lloyd Ruby

by John Lingle

Racemaker Press (2013)

racemaker.com/ 617-723-6533

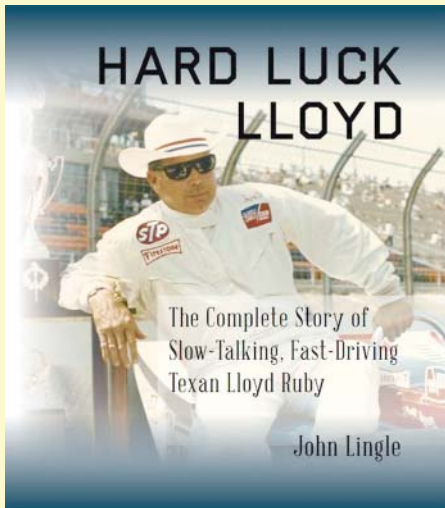
320 pages, 7.7" x 9.5" hardcover

275 b/w and color photos

Price: \$ 49.95 (now \$ 29.95)

ISBN-10: 1935240056

ISBN-13: 978-1935240051



When you read the book *Hard Luck Lloyd* by John Lingle, it will be a little painful to learn of the things that kept Lloyd Ruby from being a big-time racing champion in the sense that Mario Andretti or Dan Gurney or Lloyd's co-driver Ken Miles was. But Lingle has written the unvarnished truth and he does not sidestep these misfortunes along the path of life.

The author actually gives Lloyd Ruby a recognition and visibility he did not have in life. The reader will think that here is a man who stayed out of the limelight while he was in racing, and yet he was one of the finest drivers of his era. He was a driver's driver, as the book points out, and his friends, in the main, were other drivers, not sports writers or TV producers. He was the man in the trademark cowboy hat.

This is another one of those books in which, even if you are not in the milieu, you

accept the stories of racing scenes that are not your specialty as terrifically interesting, whether it is motorcycles, road racing, open wheel events or midgets in a small town bullring, maybe an eighth-miler. When you combine the writing of Lingle with the life of Ruby, it's all very interesting.

The author uses a lot of original, first-person material that he evidently collected over the years, stories not only from Ruby but contemporaries and competitors like the son of car-owner Bob Nowicke, historian Donald Davidson, Bobby Unser, Johnny Rutherford, A. J. Foyt and many others.

Ruby, we learn, made quick transitions from American Motorcyclist Association events in North Texas and Southern Oklahoma to midgets with outboard and motorcycle engines, Ford V8 60s and finally Offenhausers. Just at that point, Lloyd was drafted into the Army at the beginning of the Korean War (1950). Though trained as an anti-aircraft gunner, he was stationed in Georgia and not sent overseas. Upon his discharge, in 1952, he resumed, as John Lingle said, "continuing to chase his dream on the dirt-track circuits of America." He married his girlfriend Peggy in their hometown of Wichita Falls, Texas, and when racing did not bring in enough income, he worked in the oil fields and in the construction business. The culture of the era did not include the global economy, and good jobs were easy to get.

One kind of sidebar feature of interest to the technical-minded was the evolution of rear-engined cars on the USAC circuit. All of these were descended from the modified Cooper Formula One car that appeared in 1961 with Australian Jack Brabham at the wheel. This was followed by Jim Clark in a Lotus. Ten years later, there was McLaren, and they copied that too. Lola entered the picture shortly afterward. Why the team owners did not order cars from England is a mystery. Instead they copied them to create iterations such as the Mongoose and the Coyote. This worked for awhile, until conceptual improvements had to be made, and then the copiers were at a disadvantage. It's still true that the period of the late sixties and the early seventies was an era of important—and interesting—technical advances. Tricks of the trade, such as substituting a car for Indy qualifying, are also described.

Although a naturally quiet man, he would occasionally say something revealing of his thoughts, such as the remark about one of the early ill-handling wedge cars: "You

couldn't steer this thing down the beach. I mean, I'm scaring myself to death out there." Writer Lingle notes that Lloyd was one of the last drivers to convert from an open-face helmet to full-face.

In circle track racing, drivers sure don't help each other as they do in road racing, but what there is of it is explained in a story revolving around 1975 rookie Bill Puterbaugh who, coached by Lloyd Ruby and Al Unser, qualified 15th and won Rookie of the Year at Indy.

The waning years of his driving career, in the late seventies, became final in 1979—and then Lloyd Ruby, racer, became Lloyd Ruby, oilman. After that, even his retirement years are meticulously detailed by the author.

Who knows, maybe staying in road racing to the exclusion of oval track racing would have been the way to go. But now we'll never know. This is a book that makes you think; and the reader will have his or her own speculation about the path that this talented driver might have taken to fame and fortune.

—Carl Goodwin

Automobile Manufacturers of Cleveland and Ohio, 1864-1942

by Frank E. Wrenick with Elaine Wrenick, foreword by John J. Grabowski

McFarland & Company (Aug. 2016)

McFarlandpub.com/ 800-253-2187

268 pages, 7" x 10" softcover

121 b/w images, appendices,

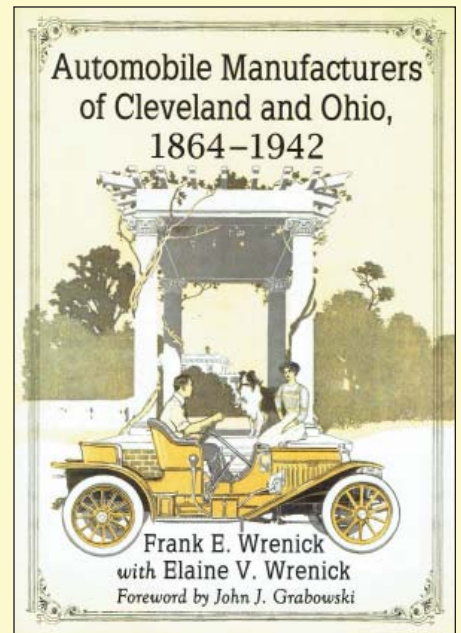
bibliography, index

Price: \$ 39.95

ISBN-e: 978-1476623566

ISBN-10: 0786475358

ISBN-13: 978-0786475353



Several cities and states have made the claim that they were Detroit's chief rival for the title "Motor City," but I've always believed that one city and state truly rivaled Detroit in the early days of the automobile industry—Cleveland and Ohio. Now there's a new book that validates that claim and does it quite well.

Frank Wrenick, a long-time transportation historian, with assistance from his wife, Elaine, has produced the definitive book on the role of Cleveland and Ohio during the early days of the automobile industry. This is not a coffee table automotive book; it's intended for the serious researcher.

That's not to suggest it's dry. Although the book is well-researched and documented, it's well written in a highly readable style. Illustrations and photos are black and white, but that's not a shortcoming.

I knew that the Cleveland automobile era ended in 1932 when the last Ford was built in that city but had no idea that its history extended back as far as 1864 and that during that span of time *550 companies* existed to build automobiles!

A small but significant number of the cars were Classics (as defined by the Classic Car Club of America); most notably Peerless, Stearns-Knight, Winton, Jordan, Owen-Magnetic and Templar. Another legendary marque had its beginnings a few miles east of Cleveland in Warren, Ohio—Packard. That's quite a gathering of motorcars! Among the famous non-Classics built in Cleveland and Ohio were Baker, Crosley and Willys-Overland.

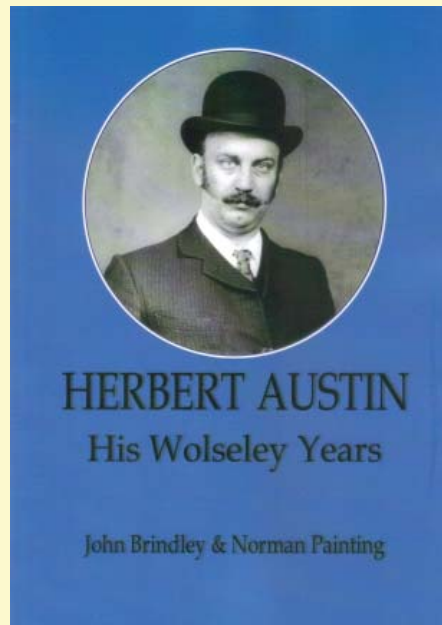
The book is divided into two parts—the *Automobiles of Cleveland* and the *Automobiles of Ohio*. Both parts include an overview as well as a detailed look at the manufacturers and makes. I have to confess that the Wrenicks found a number of obscure makes that had escaped me. Reading the descriptions of these makes, manufacturers and pioneers is absolutely fascinating.

The book includes every automobile that was built in Cleveland and Ohio, including cars that existed only as prototypes or didn't even make it that far. Significantly, the book also looks at the automotive suppliers that were based in Cleveland, who also made their impact on the automobile industry.

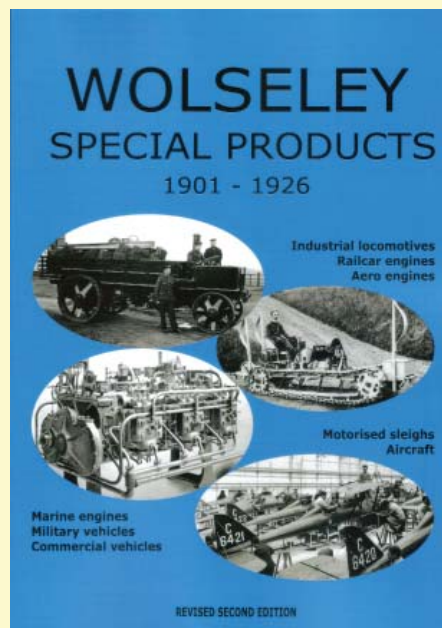
I commend the Wrenicks on a fine addition to automotive history and McFarland & Company for continuing to publish such books.

—David Schultz

Herbert Austin: His Wolseley Years
by John Brindley and Norman Painting
Self-published January 17, 2017
100 Pages, 8.26" x 11.69" softcover
127 b/w images
Price: \$ 8.56
ISBN: 978-1291145564



Wolseley: Special Products 1901-1926
by Norman Painting
Self-published March 19, 2015
138 Pages, 8.26" x 11.69" softcover
250 b/w images
Price: \$ 13.19
No ISBN



Both books self-published through Rosendale Books and sold through Lulu at lulu.com.

Wolseley transportation vehicles grew out of sheep shearing products sold from 1887 in Australia before relocating manufacture to the UK in 1889. Wolseley automobiles began in 1895 or 1896 with the business separated from the sheep shearing operations when taken over by Vickers in 1901. In due course Wolseley would become part of the Nuffield Group, BMC, BMH and British Leyland before expiring in 1975. During the Edwardian era the company dominated the market and attracted a bid from General Motors when facing financial difficulties in 1926. William Morris stepped in to prevent an American acquisition. Wolseley overhead camshaft engines were used by MG and secured the role of Scotland Yard patrol cars. The illuminated center badge was not always a happy sight in one's rear-view mirror.

Herbert Austin moved to Australia in 1884 but returned to the United Kingdom in 1892 at the age of 25 to take on progressively more senior roles in the manufacture of Wolseley products until he resigned in 1905 to create his own company.

Norman Painting used primary research material provided by John Brindley in the form of Director Minutes and accounting ledgers to disclose incredible detail in the book on Austin. Some readers may feel that purchase and accounting reports are excessive but a serious researcher will welcome this level of coverage. This reviewer would have preferred if some of this detail were relegated to an appendix to allow greater clarity for recording relevant events.

A student of Austin will find much material to appreciate and gain insight into the design and manufacturing capabilities by this self-taught man who would later emerge as a captain of the British auto industry. The author is an engineer who will delight other engineering minds by providing copious patent drawings complete with comment and analysis. These drawings and engine photographs are also a welcome component of the second book on Wolseley special products.

The second book gives an indication that if it moved mechanically, Wolseley likely built it whether on land, sea or in the air. Aircraft and aero engines were complemented by airship engines. Marine applications, both above and beneath the surface, spanned from 2-cylinder engines to a 600 hp 16-cylinder 54-valve submarine engine in boxer formation. There were inline 12-cylinder racing boat engines as well as twin V8 applications. The novel two-wheel

Gyrocar is covered in depth as an example of land-based transport. Engines for every form of wheel are present, railcar wheels, tracks, plows, skis/sleigh adaptations and the usual hard or inflated rubber wheels. Commercial and military vehicles applications are too many to mention. Wolseley had electric vehicles, and electro-magnetic gearboxes. With such diversification it is little wonder that the company faced liquidation in 1926. In many ways Wolseley could be viewed as the skunk works of the large Vickers military organization.

The first book is indexed but not the second. Because of the vast variety of mechanical variations in the second book the author has chosen to devote most of the

text to describing individual photographs or drawings, usually in patent form. The end result is a story that is not “stitched” together within conventional chapters but this approach does serve to explain the many mechanical devices illustrated in an appropriate manner.

These books will appeal to an engineer who will be puzzled that any enterprise could become involved in such a vast array of mechanical applications. The first book looks at Herbert Austin while the second serves as a product catalog history from an organization that had many fertile minds likely groomed by Austin in the formative years of Wolseley.

—Louis F. Fourie

The Cadillac Northstar V-8: A History by Anthony Young

McFarland & Company (Feb. 2017)

McFarlandpub.com/ 800-253-2187

196 pages, 6" x 9" softcover

80 b/w and 9 color images

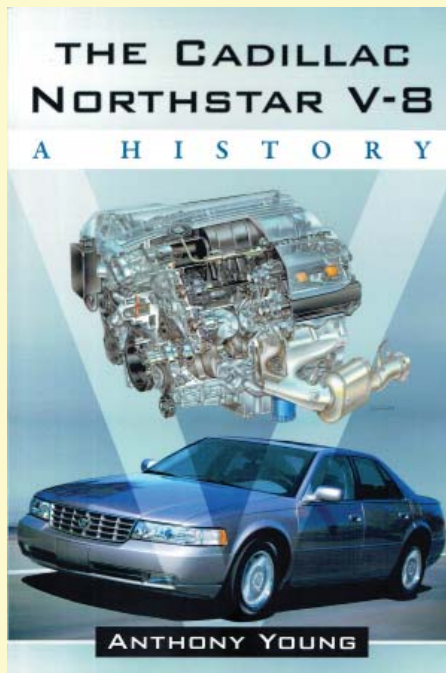
Chapter notes, bibliography, and index

Price: \$29.95

ISBN-e: 978-1476624631

ISBN-10: 0786471182

ISBN-13: 978-0786471188



The engine is the most venerated component of an automobile—and any given marque is often characterized by the features, engineering, and quality of its engines. While any other component could be outsourced—even the transmission—with little adverse impact in how a given model is perceived, an outsourced engine could

negatively affect the way a model is received in the market, particularly by enthusiasts (e.g., the BMW designed engines installed in the Rolls-Royce Silver Seraph and the early Bentley Arnage examples). Conversely, a marque achieves greatness when the features, engineering, and quality of its engines distinguish themselves—and Cadillac has certainly distinguished itself with its engines multiple times in its history.

While the first V8 powered passenger automobile available to the public was offered by Rolls-Royce (i.e., the 3½ liter 90° V8 “Legalimit” and “Invisible” models shown at the Olympia Show in London, November 17-27, 1905, and appearing in their 1905-06 sales catalogue—only three complete cars were built), and the first production car with a V8 was the 1910 De Dion-Bouton, it was the 1914 Type 51 Cadillac that was the first truly mass-produced automobile with a V8. The V12 and certainly the V16, both produced in the 1930s, were also high-water marks in Cadillac motor engineering. In *The Cadillac Northstar V-8: A History*, author Anthony Young tackles the subject—the last time Cadillac would set another high-water mark in motor engineering, but it wasn’t all rosy, given the decision in 2005 to have all engine design centralized within “GM Powertrain” (recently renamed GM Global Propulsion Systems), which would service all GM divisions.

If the author’s name sounds familiar, that may be due to the host of articles he wrote for *Automobile Quarterly* from 1980 to 2011—covering subjects like the front-wheel drive Oldsmobile Toronado, the HEMI, NASA’s Lunar Rover, and Cadillac concept cars—and he has also written other books on transportation, aerospace, and social history.

He has a degree in Industrial and Product Design from the Pratt Institute. In tackling the story of the Northstar engine, the author conceded that “over the years corporations have grown less open and accessible to researchers and historians.” To overcome this, he “found practically all the information [he] needed in published Society of Automotive Engineers (SAE) papers, books, relevant articles, road tests, blog postings and other sources.”

The introduction of the book is a 25-page historical overview of Cadillac, which was a welcomed way to assimilate to the subject of the book, covered in nine chapters. The author “chose to write a history of the Northstar V-8, the Cadillacs and other GM vehicles it powered because of [his] familiarity with the Chevrolet LT5 32-valve DOHC V-8 that powered the ZR-1 Corvette.” This Corvette engine is the subject of the first chapter, which is extensive—reflecting that familiarity. Next, the reader takes a tour of development and production life of the Northstar—a dual overhead cam (DOHC) 32-valve V8 engine, which was the most technically sophisticated engine made by Cadillac. Over its life, it was used in rear-wheel drive and front-wheel drive configurations.

The subject was further covered by a look at concepts like the Cien (Spanish for 100, to coincide with the hundredth anniversary of Cadillac). The car was originally going to feature a mid-engine Northstar V8, but a concept XV12 version was used. Though the V12 was under development after the premier of the Cien, GM decided not to put the engine into production. Covered in this same chapter was the story of the Sixteen—the V16 concept that Bob Lutz pursued shortly after he joined GM in 2001. The resulting prototype was stunning, though like the V12, it was never produced. The book’s final chapter covered collectible Northstar V8 Cadillacs—what to look for and be aware of when evaluating a purchase.

For late model Cadillac enthusiasts: this book should be in your library. If you are of a certain age, you’ll enjoy the scope covered (e.g., remember the V-8-6-4 of the early 1980s?... it gets a quick mention). Just the same, if you’re new to the subject—either Cadillac or the 32-valve DOHC engine—with its marque overview and the way it touches on various related subjects, this may be just the book to satisfy your general interest and even create a steady interest by the time you finish reading.

—R. Verdés

Concours Retrospective

by Richard Adatto, Dennita Sewell, Sandra Button, Michael Furman

Coachbuilt Press (2015)

coachbuiltpress.com/ 215-925-4233

240 pages, 12¼" x 12¼" hardcover

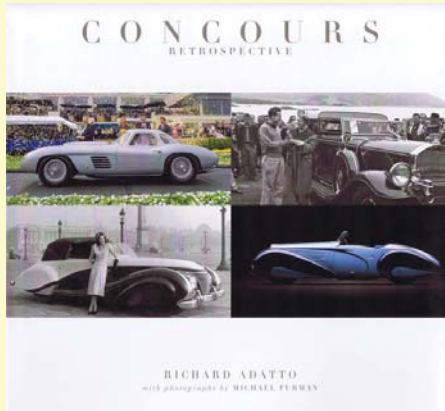
130 b/w and 76 color images

Bibliography, author biographies

Price: \$100

ISBN-10: 0988273349

ISBN-13: 978-0988273344



A concours d'élégance is an evolved creature—a little like the Oscars, a little like the Westminster Kennel Club Dog Show, a little like an art exhibition at a prestigious museum, and a lot like nothing else. Its modern incarnation resonates with its heritage, as it is still a competition celebrating both the aesthetic and engineering art of the automobile. The process by which that competition is executed is probably the component that has evolved most. This book mimics the concours d'élégance in that it celebrates the aesthetic and engineering art of photography and printing in its essay presentation of the history of the concours d'élégance.

The term “coffee table book” is often used as a moniker for an expensive book where the size and eye appeal are ahead of the content, and intended predominately for casual reading. However, the author and photographer quickly justify the placement of this work on the shelves of your automotive library. (OK, it'll look great on a coffee table too.)

Author *Richard Adatto* will be familiar to readers of this *Journal*, as *Taylor Vinson* reviewed two of his books: *From Passion to Perfection: The Story of French Streamlined Styling 1930-1939* (2003, SPE Barthélémy, ISBN: 978-2912838223; see SAHJ No. 206) and *Delage Styling and Design: La Belle Voiture Française* (2005, Dalton Watson, ISBN: 978-1854432049; see SAHJ No.

222). Mr. Adatto also serves on the advisory board of the Pebble Beach Concours d'Elégance, where he has been a judge for more than 25 years.

Photographer *Michael Furman* developed a distinctive style of automotive photography that is instantly recognizable for its rich quality. For more than 25 years, he has been photographing individual cars and whole collections, which led to publishing. To achieve the quality he sought to showcase his images, Mr. Furman established Coachbuilt Press to employ the highest standards for superlative printing and bookmaking. There are sixteen titles currently listed on the publisher's website. Dennita Sewell, Curator of Fashion Design at the Phoenix Art Museum, authored a chapter titled *Elegance and Style* covering the haute couture heritage of the concours d'élégance, and *Sandra Button*, Chairman of the Pebble Beach Concours d'Elégance, wrote the book's introduction.

The subject is covered in six chapters, covering the history of the concours in a chronological arc. The first chapter—same title as the book—explores the roots of what would become the concours d'élégance in the 20th century; and that analysis went back as far as the Roman era (the first great road builders). The remaining chapters—save Ms. Sewell's chapter—cover the periods from the dawn of the 20th century right through the present time.

The writing engages the reader—particularly if there is interest and familiarity with the subject. As a “retrospective” it concentrates on covering the past. There are statements that could have benefited by further elaboration or qualification, such as: “The golden age of the car ended in 1939, when the German army forced the French coachbuilders to close their doors.” This one also stood out: “Today, only two major manufacturers offer custom coachwork: Ferrari and Rolls-Royce.” Bentley Motors may take issue with that statement. “The golden age of the concours is now.” Agreed, though one hopes that's not so.

The images are indeed a delight—certainly those produced by Mr. Furman, but there was also brilliance in the selection of past images. It was surprising to see one familiar image of a 1949 Rolls-Royce Silver Wraith (chassis LWAB63) with one-off coachwork by Franay, yet this was a different version—in the familiar version the young lady was looking at the camera, in this version she's looking away. The familiar photo has uneven lighting, which would have pre-

sumably affected the book's version as well, but time must have been spent to correct and balance the lighting. Impressive. The images are not confined to automobiles—for example, there's a splendid picture of Lucius Beebe, described by the perpetual trophy that bears his name at Pebble Beach as “a bon vivant who served among our early judges.” In the book's caption he is described as an “author and photographer”—but one look at the photo and you suspect a whole lot more, and he was, as the caption on his January 16, 1939 *LIFE* magazine cover photo stated: “Lucius Beebe sets a style.”

This is a book that will be a delight every time you open it. And if you are not careful, you'll find yourself noting aspects of cars in their eras that are lost in our time... aspects of culture, grace, and “élégance.”

—R. Verdés

Ford Motor Company Worldwide Employee Badges, ID Cards, Passes & Permits

by James Krucki with Kenneth Coates & Timothy O'Callaghan

Early Ford V-8 Foundation and Museum (2015)

Fordv8foundation.org/store

(260-927-8022)

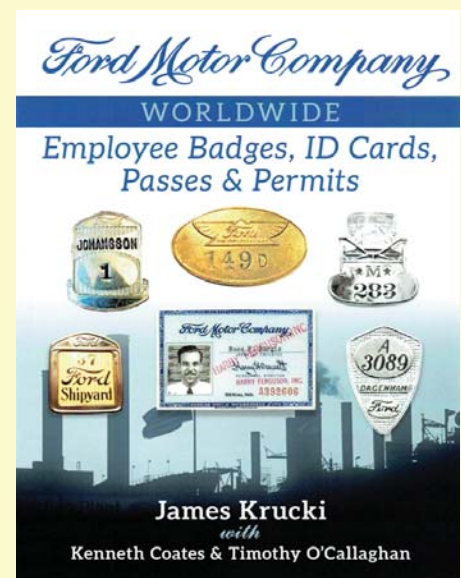
250 pages, 8½" x 11" softcover

1389 b/w and 496 color images

Appendices, no index

Price: \$48.70 (includes U.S. shipping)

ISBN-13: 978-0692588864



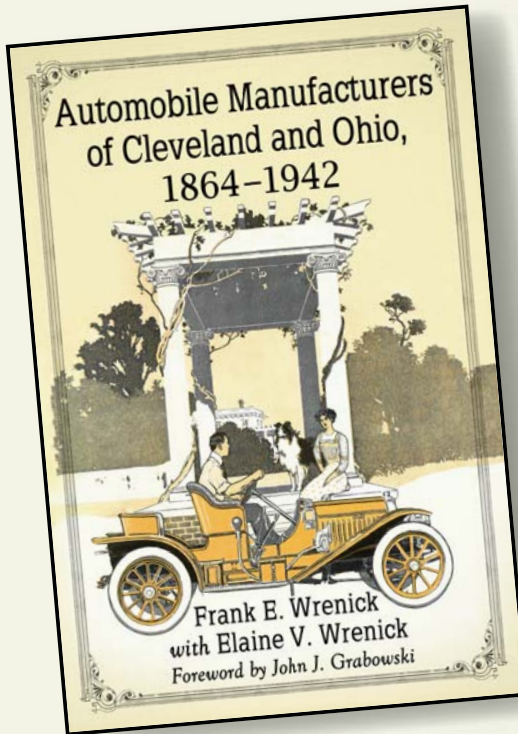
As the title suggests, this is indeed a book focused on badges, ID cards, passes, etc., issued by Ford to allow employees and authorized persons access to their facilities around the world, ranging from 1912 to 2015. With its spiral spine, rugged con-

struction, and desktop publishing style and presentation, it almost looks like a catalog for ordering badges. The sheer volume of images and corresponding captions is astounding.

The book was a not-for-profit effort by the Ford Badge Project group as a reference work for collectors. Mr. Krucki is a retired high school mathematics teacher, and spent 40 years building a collection of Ford memorabilia. Both co-authors were former Ford employees for decades. In addition to cataloging a surprisingly wide variety of identification devices, there is an appendix with articles and tables, with sections evaluating rarity and a badge location table that will connect a badge to a given location, the activity of that location, and the years the badge was used.

The book was donated to the Early Ford V-8 Foundation and Museum (a non-profit 501(c)(3) under U.S. tax code), and all profits go to benefit that organization. For an extended look and peek inside, seek the blog entry on Hemmings.com by Daniel Beaudry. Without doubt, this is the only book of its kind on the subject—a tour de force in a very pointed field of automobilia reflecting years of experience and work to produce.

—R. Verdés



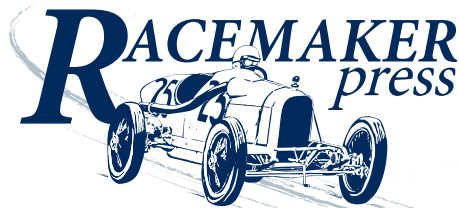
This comprehensive reference book catalogs more than 550 Ohio auto manufacturers, from Abbott to Zent. There are familiar marques, such as Jordan, Baker, Peerless, and White of Cleveland, along with Packard, Stutz, Crosley and Willys, as well as obscure ventures—even those that never got beyond the concept stage. Attention is given to the various ancillary industries, services and organizations which grew up alongside Cleveland's automotive industry.

\$39.95 softcover (7 × 10)
126 photos, appendices,
bibliography, index
ISBN 978-0-7864-7535-3
Ebook ISBN 978-1-4766-2356-6 2016



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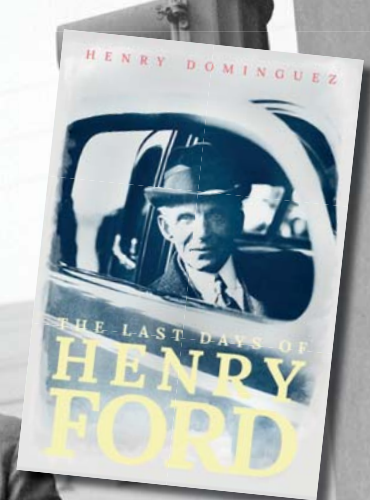
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N° 224 - 45^e Année PRIX : 200 francs JUILLET-AOÛT 1957
RIEGLÉ ÉDITEUR - PROPRIÉTAIRE

P. Chabouney